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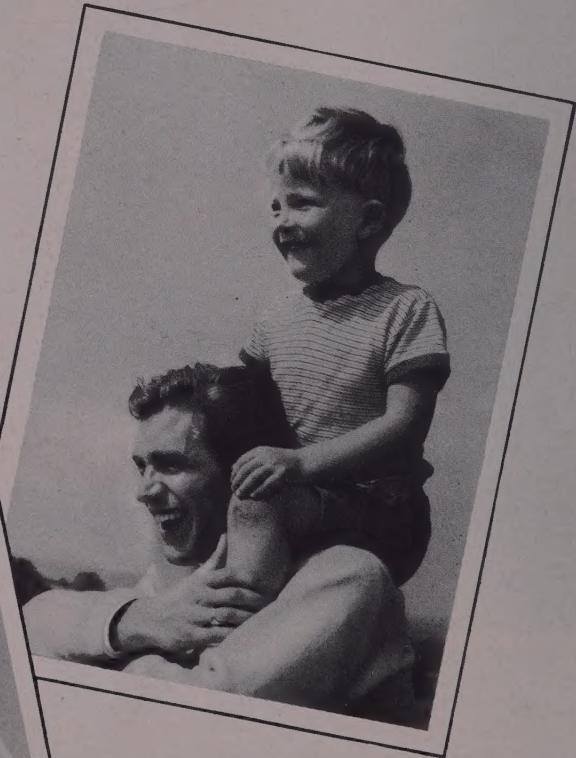
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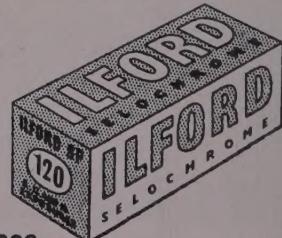


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The Rediscovery of Roman Corsica

by DOROTHY CARRINGTON

JAMES BOSWELL formed a low opinion of Corsica's Roman ruins when he went to the island in 1765 to meet the patriot leader, Pascal Paoli. "I say nothing of the ruins of Mariana and Aleria," he wrote in his *Account of Corsica*, ". . . for as Corsica was much disregarded by the Romans, they did not think it worthy of having any of their taste and magnificence employed in it. So there are no vestiges of ancient grandeur."

As one may gather from his *Journal*, Boswell never visited either Roman town: his information was based on hearsay. He was merely repeating a popular assumption which subsisted, in Corsica, up till two years ago. Prosper Mérimée, Inspector of Historic Monuments, lent it weight and authority in his *Notes d'un Voyage en Corse*, published in 1840. The ruins of Aleria, he wrote, were composed of the roughest masonry; it was impossible that the Romans had been responsible for such buildings; they must have been the work of "Christian barbarians" of the 7th and 8th centuries, or of subsequent Saracen invaders.

His depressing report had the effect of discouraging archaeological researches for the best part of a hundred years. The climate was another deterrent. Both Roman towns are situated on the east coast of Corsica, and until World War II

In July 1957 we published an article on Corsica's links with ancient Crete. This one, by the same author, brings the story 2000 years nearer our own time. But Corsica is by no means only an archaeologist's paradise, as the next article, by Robert T. Lewis, shows

brought D.D.T. to the island the region was plague-stricken with malaria.

Conditions must have been different in classical times, for it was precisely here that the Romans elected to build their two most important Corsican towns: Mariana, founded by Marius in 93 B.C., and Aleria, which became the capital, founded by Sulla thirteen years later. Both were the centres of colonies peopled with veteran soldiers.

Moreover, Ptolemy's 2nd-century geographical description of Corsica mentions a chain of ports and towns running all the length of this coast: eleven out of a total of twenty-nine shown in the whole island. Today, and at all times since the Middle Ages, the mountainous west coast of Corsica, healthy and windblown, has been quite closely populated, while the east, flat and marshy, has remained a desolate wilderness, largely uninhabited and untilled. As for modern Aleria, the village consists of an old fortress and a dozen or so dilapidated houses. When Mérimée visited the place he found only a single inhabitant, an old man. Comparison with Ptolemy's map reveals drastic changes: the annihilation of numerous towns, large-scale shifts in population, the ruin of the most fertile area of the island. It demonstrates more vividly than the annals of history how completely Roman civilization, in Corsica, was destroyed.

Fortunately there are enough classical texts and inscriptions to enable us to compose a clear outline of Corsica's ancient history. We know that Greeks from Asia Minor founded a city on the site of Aleria about 560 B.C., that Greeks, Etruscans and Carthaginians disputed the control of the coast until the Roman conquest of 259, and that the Corsicans resisted the conquerors in a series of ferocious revolts until 163. We can also learn that the Romans finally penetrated and administered the whole island, that Seneca was exiled there, and that the landlocked bays of the east coast became bases for the fleet of Misena.

History, then, contradicts the notions propa-





British Museum

Corsica, from a 1620 Strassburg edition of Ptolemy's *Geographia*, compared with a modern map

gated by Boswell and Mérimée. If the Romans spent nearly a century conquering and pacifying Corsica in a sequence of costly campaigns, they must have attached considerable importance to this, the oldest of their overseas possessions after Sicily. And it is easy to understand why. Corsica is indispensable to any power that seeks to dominate the western Mediterranean. It commands the western approaches to Italy and the sea-routes to the Levant. In the days of sailing and rowing craft, the island offered exceptional advantages. The enormous pine forests of the interior were a source of the best wood for ship-building; the bays provided numerous harbours. Moreover, the central mountain range acts as a screen against the prevailing, and violent, west winds. Roman shipping on the routes Rome-Sicily and Rome-Carthage could therefore sail up and down the east coast in safety, with a choice of well-protected ports.

These alone were sufficient reasons why the Romans should have been at pains to conquer Corsica and settle its eastern seaboard. Some urgent economic factors were also involved. The



A. J. Thornton

Romans suffered from a chronic corn-shortage, and the level east coast of Corsica is suited to large-scale crops.

The deterioration of this rich plain, and the wretched appearance of some of the Roman ruins, are again explained by history. The fall of Rome was followed, in Corsica, by a Vandal invasion; and the Vandals, we know, recklessly cut the mountain forests. They thereby set in action a process of erosion which has continued, disastrously, ever since. The rivers washed down the top-soil which clogged the estuaries and silted up the old Graeco-Roman harbours. The Romans, who were supreme hydraulic engineers, had organized extensive water-supplies with a network of irrigation channels which can still be detected. When these fell out of use the marshlands spread. The east coast became a breeding-ground for malarial mosquitoes as dreaded as any tropical white man's grave.

As for the Roman towns, they were very thoroughly wrecked by a succession of invaders: Vandals, Ostrogoths and, after some centuries of Byzantine administration, Saracen raiders

who cut Corsica off from the rest of Europe for more than two hundred years. To escape their recurrent barbarities the population fled to the mountains; the towns were abandoned, and agriculture, on the coasts, came to an end.

Two points of view, then, were current when in 1958 the French official archaeologists, M. Jehasse and M. Boucher, received adequate funds to undertake extensive excavations at Aleria. What were they to expect? The meagre relics of a small, poor Roman outpost? Or the traces of the prosperous capital of an important Roman province? In spite of Mérimée's chilling comments, acquaintance with the site gave support to the latter view. The ruins, if unprepossessing, were far from negligible. An amphitheatre, a broken arch, and many heaps of masonry rose from a carpet of shivered bricks and tiles. Moreover, Aleria had yielded antiquities to generations of treasure-seekers: sculpture, inscriptions, quantities of coins, vases and small objects in glass and ivory and bronze.

The preliminary researches of the two archaeologists had in fact answered the question before excavations were begun, though not in a way

that the general public could easily appreciate. The quantity, quality and variety of fragments of Greek and Roman pottery they had collected on the site sufficed to prove that the town had been a thriving commercial centre all through classical times. Greek ceramics dating from the 6th to the 3rd century B.C., from Ionia, Athens, Tarentum, Sicily and Campania, an incredible amount of highly decorated Roman ware from the world-renowned manufactories of Italy and Gaul, were positive evidence of the high standard of living of the pre-Roman occupants—mainly Greek—and of the Roman merchants and colonists. From the accumulation of such minute fragments history can be rewritten: in this case the history of a town that flourished for some thousand years.

This is archaeology of the most scientific kind, as far removed from the treasure-hunting of early antiquarians as is modern medicine from witch-doctoring. The excavations of 1958 and 1959 have presented the rediscovery of Aleria in another form; one more intelligible to the public. In two summers' work the ground-plan of a complete Roman city has been laid bare: the

In Roman times, the fertile east coast of Corsica was covered with cornfields, while prosperous ports and cities strung along its shore traded with all the Mediterranean. Today it is a marshy waste, depopulated by centuries of malaria, and the landlocked harbours are empty and silted up

All photographs by R. T. Lewis



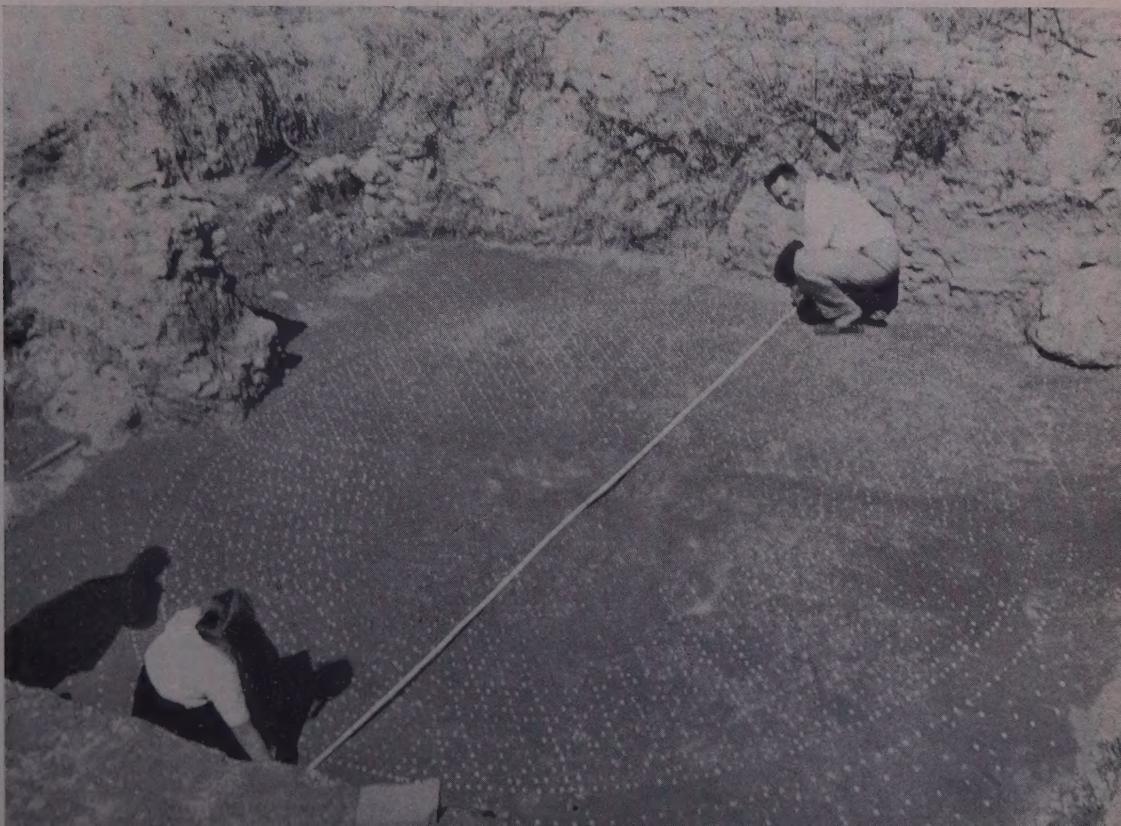


Aleria, once the capital of Roman Corsica, is now ruined and desolate. The present village is seen (above) behind fragments of a Roman triumphal arch. It consists of a few bleak houses, a church, and (below) a 16th-century fortress, still inhabited in spite of its battered and neglected appearance





The bases of great brick columns, forming an L-shaped double colonnade, remain to suggest the grandiose architecture of a vast building overlooking the forum of Aleria, probably the *praetorium*, or seat of the governor. (Below) In a house near by, a fine geometrical mosaic pavement has been unearthed intact



forum, once ornamented with colonnades and an equestrian statue of gilded bronze; a monumental edifice—probably the seat of the governor—with spacious columned hall and a triumphal arch incorporated in its façade; a temple, still recognizable in spite of the loss of its colonnade; streets leading to amphitheatre and cemetery; houses, ramparts and the main gateways to the town.

Signs of wealth and taste are not lacking. In a house close to the forum a perfectly preserved mosaic pavement of the times of Sulla has been discovered, while vestiges of black and red and orange stucco of a later period recall the elegant interior decorations of Pompeii. If few undamaged works of art have come to light the reason is obvious enough: the ruins show that the town was burnt, sacked and savagely mutilated in post-Roman times. The temple, it seems, was demolished in the 4th century when a Christian chapel was built alongside it; the amphitheatre became a mediaeval fortress. Destruction so thorough accounts for the uncouth appearance of many of the Roman ruins: the marble slabs which originally faced their massive masonry were no doubt pulverized by the

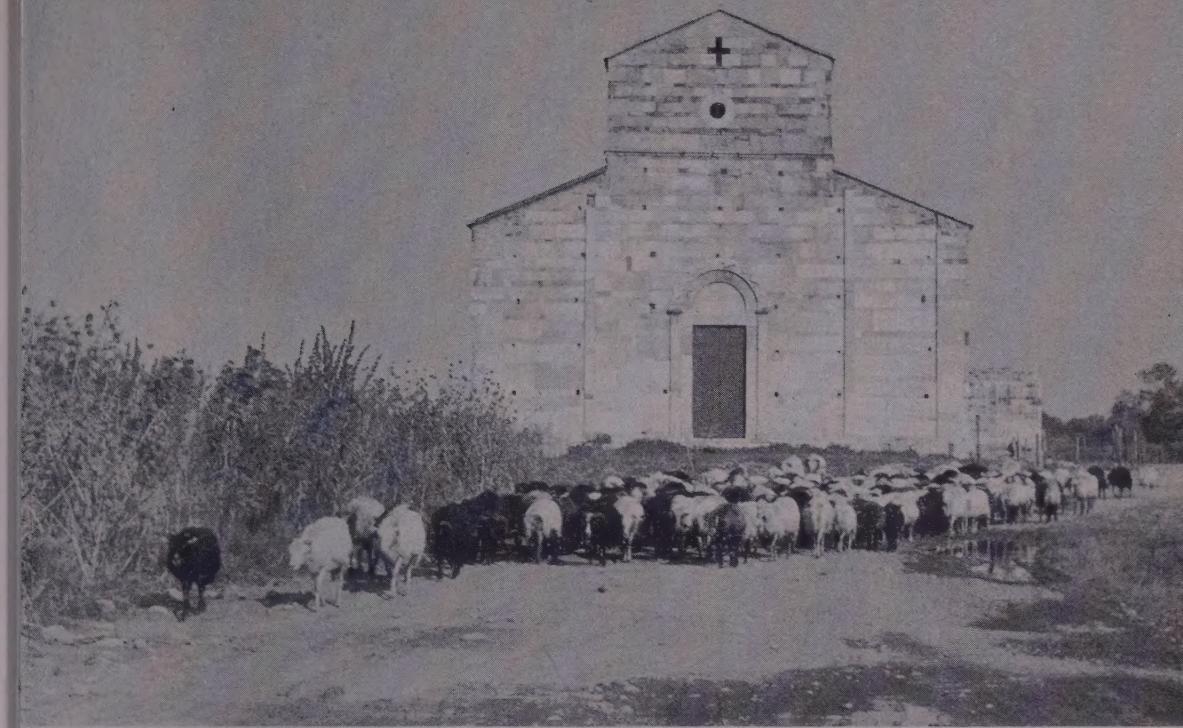
barbarian invaders to produce lime.

Yet the skeletal remains of Aleria now exposed to view nevertheless allow one to imagine what it must once have been: a prosperous urban centre, built on a historic site, equipped with all the amenities of civilized living. A vast building outside the city walls, escaping deliberate damage, still stands, in places, up to roof level. The ruin, until now smothered in figs and briars, is known as *Sainte Laurine*, and was generally considered as that of a palaeo-Christian church. Excavations have, however, revealed no signs whatever of a church, but the unmistakable remains of luxurious Roman baths.

The two archaeologists have filled their spare time prospecting the surrounding country. On the densely wooded shores of the *Étang de Diane* (Ptolemy's *Portus Artemis*) they have discovered the site of the Roman naval port, besides the foundations of various villas. To the north they have located *Opinon*, one of the lost towns of Ptolemy; far to the south, in the great bay of *Porto Vecchio*, Ptolemy's *Rubra*, "the red", in a spot where the rocks, significantly, are of a rosy granite. Roman topography, obliterated for some fifteen hundred years, is being methodically

The walls of the Roman baths at Aleria are mirrored in rainwater which fills the cold-water pool and the marble-paved hall. Standing outside the city walls, this large building escaped complete destruction. Before recent excavations it was thought to be a church, and called *Sainte Laurine*





An austere Pisan cathedral, consecrated in 1119, dominates the site of Mariana, the oldest Roman city in Corsica and the capital of an ancient bishopric. Little can be seen of once thriving Roman or mediaeval towns in this empty plain frequented only by nomad shepherds and their flocks

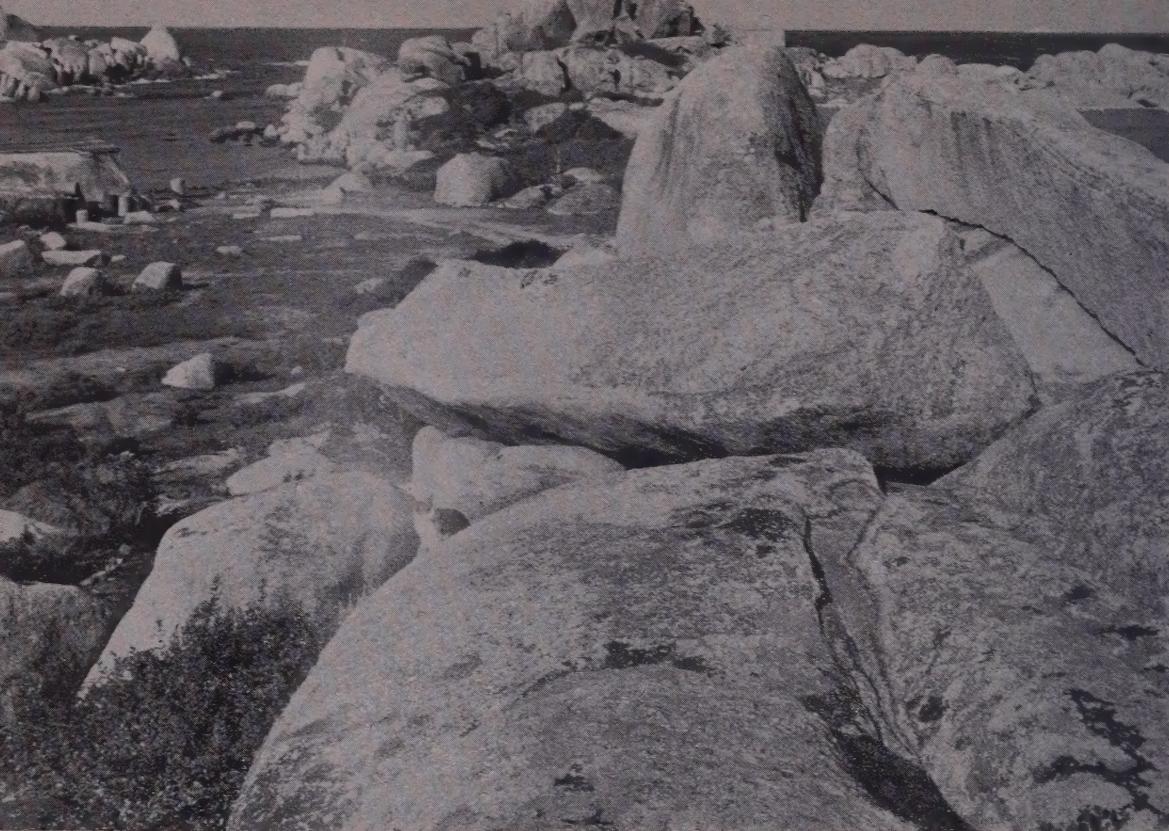
re-established, and the towns that once lined the whole east coast are now being resuscitated as deposits of brick and pottery and tiles.

Mariana, to the north, is the next on the programme of excavations. Here a few Roman ruins—brick buildings, ramparts, tombs—have survived, but up till now researches have been side-tracked by the more obvious appeal of the magnificent mediaeval churches on this site. Mariana and Aleria were the capitals of bishoprics in the early Middle Ages. When the Pisans took possession of Corsica after the Saracen interregnum they rebuilt the ancient cathedrals on their original sites, regardless of the fact that the coast had become derelict and unhealthy. But the old Roman cities never revived, and subsequently the seats of the dioceses had to be transferred inland. So Mariana offers the weird and moving sight of an abandoned 12th-century cathedral, austere and majestic, and the ruined church of San Parteo, built in the same grandly sober style, stranded, like great ships on a beach, in an empty plain where for centuries only sheep

have gathered. But under the cropped grass lie the rich relics of a Roman city: a young archaeologist, Geneviève Moracchini, who specializes in the Middle Ages, recently unearthed a fine mosaic pavement close to the cathedral.

At the extreme opposite end of the coast, Bonifacio, walled mediaeval stronghold, occupies the site of Ptolemy's Marianon. Few souvenirs of the Romans have survived in this spot which was completely rebuilt in the 13th century. But overlooking the port a Roman column, irregular in form, stands as a spectacular war-memorial. It was not, however, found at Bonifacio, but brought here, as an inscription notes, from "the lost isle of San Bainzo".

San Bainzo, some three miles off the south-east tip of Corsica, does not figure on Ptolemy's map, nor does the larger adjoining island of Cavallo. Yet there the Romans quarried immense columns and hewed them roughly into shape for export. They must have been shipped direct to Italy. None has been found on the Roman sites in Corsica, where the columns are



The rocks of the little island of Cavallo, off the south-east coast of Corsica, rise from the sea in fantastic rounded formations. Huge embryo columns are stacked above the beach near the only permanent building, the bungalow inhabited by the Comte de Varlemont, the owner of the island

all composed of segments of stone or brick.

On Cavallo, moreover, two bas-reliefs, crudely carved in the natural rock, have excited the curiosity of generations of fishermen who sheltered there in times of storm. Few others have seen these enigmatic works, for until some enterprising campers settled on Cavallo a year ago the islands had been uninhabited since time immemorial.

In the hope of clearing some of the mystery that surrounds these ancient settlements, M. Jehasse and his wife ended last summer's work with a visit to the islands. I joined the expedition with the photographer, Mr R. T. Lewis. Rough autumn seas prolonged our crossing; from a fishing boat washed by aquamarine waves we saw the island cliffs through a veil of spray. At closer quarters we were impressed by the exceptional quality of their granite. The silver-grey rocks have been weathered into fantastic shapes, but shapes massive and rounded, like the sculpture of Henry Moore, whereas the granite else-

where in Corsica, much more friable, is hollowed and pitted like gruyère cheese.

On landing on Cavallo we found the relics of Roman work all round us: gigantic monoliths, fifteen feet long and more, piled haphazard on the shore. Others lie scattered on a smooth surface of rock that slides like a ramp to the water's edge.

The main quarry is to be found at the top of this slope. Here the rock-face, perfectly even, is deeply scored with a horizontal groove which marked, apparently, the width of the next column to be cut away. The last to have been extracted, enormous and rectangular, lies at the foot of the escarpment. Nothing has changed, since the quarry was abandoned and the stone merchandise left, unaccountably, on the spot. The sensation of penetrating the past was poignant; at any moment, I felt, we might stumble over a Roman slave, sleeping through the mid-day break in the shade of a boulder.

Close to the quarry we came upon one of the



Colossal monoliths of granite, hewn from the Roman quarries of Cavallo, were rolled down the smooth rock slopes to the water's edge to await embarkation. All these columns, it seems, were exported to Italy; not one has been found in the Roman ruins of Corsica, where the columns are built of triangular brickwork segments, originally faced with stucco. (Above) On the horizon, to the south of Cavallo, is another uninhabited island also surrounded with reefs of barren rocks. On one of these the French troopship *Semillante* was wrecked in 1855, with the loss of everyone on board. The cemeteries in which the dead are buried, which cover much of the island, are a reminder that the Straits of Bonifacio are among the most dangerous waters in the world. (Right) Among the roughly hewn granite shafts on the shore stands the round base of a Roman column



bas-reliefs; a life-size bust, carved in a lump of natural rock. It is a masterful Roman face, thick-cheeked, heavy-jawed, probably bearded. The lower part of the bust terminates, decoratively, in the form of an urn. Another, similar, urn is carved in the rock close beside the head.

The few people to have visited Cavallo have regarded this work as a funeral monument, carved by slaves in honour of a comrade killed at work. M. Jehasse was able to qualify this somewhat romantic supposition. It may equally well be of a religious character: Roman altars habitually bore such sculptures. The urns, no doubt, are images of the *olla*, the vase for libations.

At any rate it seems evident that the second bas-relief is a monument of this nature. It is carved in a niche, on a rock near the well

recently sunk for campers. Again the head is heavy and brutal-looking. Alongside, engraved in the granite, appears the outline of a vertical object which visitors have variously interpreted as a tool, a sheathed dagger, or an axe.

But M. Jehasse has identified it as a club, attribute of Hercules. This mythical hero, symbol of physical force, triumphant performer of prodigious deeds, was the patron of great human labours; Hercules Saxonus, "the breaker of rocks", was venerated in the Roman quarries of Italy and Gaul. Here, then, is a portrait and shrine of the mighty demi-god; a crude portrait, a rudimentary shrine, which served the aspirations of the toiling slaves of Cavallo. It must have overlooked the huts where they rested after their day's work, for the quantities of broken brick and pottery lying near by show that this spot, close to the best water-supply in the island, was

One of the main Roman quarries of Cavallo. The face of the rock is cut perfectly smooth, and a deep horizontal groove marks the width of the next column to be extracted. The work appears so fresh that one might easily imagine that the Romans had only recently abandoned the quarries





The powerful, crudely executed bas-relief rock-carvings of Cavallo have an archaic air, probably because they were the work of slaves. Archaeological evidence suggests that they belong to the end of the Roman Empire, around the 4th century A.D. The bust set in a niche represents, as the club carved beside it suggests, Hercules Saxonius, breaker of stones, patron of human labour

the site of the Roman settlement. Such primitive sanctuaries, carved in natural rock, were rare in Roman times, but another example is known at Saint-Béat, in the French Pyrenees.

The sanctuary of Cavallo, the coarse, powerful sculptures, and the immense embryo-columns, have a misleadingly archaic air. One could easily conceive them to be the vestiges of a very ancient occupation. But the findings of M. Jehasse refute this notion. All the pottery dates from the 4th century A.D., while the roughly baked bricks equally belong to the latest Roman times. This indeed explains why the island was not mentioned by Ptolemy. The Romans must have launched this commercial venture at the very end of their reign in Corsica; one calculated, we can assume, to satisfy the extravagant building tastes of the last emperors. The monstrous monoliths of Cavallo and San Bainzo were the raw material of Rome's decadent baroque age.

Imagination would see the Romans fleeing the islands before the Vandal invaders, abandoning their wealth in stone in their panicked evacuation. But no. Evidence suggests, on the contrary,

that the quarries continued to be exploited in the early Middle Ages. Much of the brick appears to be post-Roman; moreover, a large block of stone is carved with mouldings which are foreign to classical convention. Another picture of Cavallo, then, can be envisaged: an island spared the nightmare of the barbarian invasions, where the traditions of Roman craftsmanship lingered on, perhaps through the centuries of Byzantine rule.

What happened to Cavallo and San Bainzo? No chronicler mentions the islands. But according to local unwritten history, passed down by word of mouth, they became a base for the Saracens who began raiding Corsica in the 8th century. This is likely enough: Cavallo, with its many hidden creeks, would provide an ideal hide-out for their fleets. It was no doubt the Saracens who destroyed this isolated settlement, this tenacious industrial enterprise, just as they destroyed the remnants of Roman civilization in Corsica and wiped the towns of Ptolemy off the map. Nothing the Romans had brought to Corsica remained, except their scattered ruins, and their language, which has survived as the Corsican dialect up to this day.

Corsica's Charm

by ROBERT T. LEWIS

ISLANDS are generally extroverts. They attract escapists, extroverts like themselves, who as soon as they reach their island take the Gadarene route to the shore, where they gaze outwards at the distant horizon and which they leave only to inspect the shore on the other side. Few islands merit more attention than that.

Corsica is different. It is an introvert among islands. It grasps you as you arrive, turns you round away from its shores and lures you inland. The sea is to refresh you for such journeys. How quickly you forget the Riviera from which you sailed. Sardinia is only a few miles away but it does not attract. Corsica is sufficient of itself.

Corsica's appeal is summed up in a conversation I had with a bearded Norwegian who had just moored his yacht *Tiki* at Calvi. When I asked about the name, he explained that he was Erik Hasselberg, one of the *Kon-tiki* expedition. He had built his own yacht, sailed it from Norway in search of his ideal, reaching Corsica where he has remained for three years.

"Will you be going back to the mainland?"

"Not soon . . . some day . . . I must go back to Cannes." He was silent for a few minutes and I wondered whether he was hankering after the bright lights. "Why Cannes?" I asked.

"I left my bicycle there by mistake."

Yes, it is only necessity—work or a forgotten bicycle—that will make you leave Corsica.

Hasselberg explains the lure of Corsica. "It has the sunshine, wildness, the remoteness of Polynesia, the same magical beauty but with more comfort, better food and a living culture. Without these, men starve. Its climate does not destroy. See what Tahiti did for Gauguin."

There are many more assets than the sea on the credit side of Corsica's balance-sheet. From the quay at Calvi you watch people diving into deep water from the mole, or wading out a quarter of a mile from the pine-shaded beach and still not shoulder deep. Then your eye roves over the bay and you watch a floating cloud, caught momentarily on the shoulder of a ravine. As it moves it discloses a village that seems to be creeping up the mountainside to hide its head in a valley which you decide to explore. And the

next day you leave the beaches and explore. The sea cannot hold you.

And what do you discover? The perfumed *maquis*, an undergrowth of myrtle, arbutus, heath, rosemary and broom: the scented isle. The villagers regard your presence not as an intrusion but as a compliment. They will perform any service for you and resent the suggestion of a reward. A camper will often find a jug of goat's milk and a home-baked loaf outside his tent in the morning. With difficulty he will track down the kindly shepherd who anticipated his wants.

The tourists even are different; they are purposeful. One couple will be mountaineering, sleeping in disused shepherds' huts, others painting and photographing—and what a challenge the island is to both; ornithologists studying migration, for Corsica is a stop-over for birds; others are exploring the island's past, some collecting rare botanical specimens.

Bandits crop up in all conversations. A very few still remain. They are the occasional taxi driver or restaurant proprietor. You might be wise to negotiate your ransom beforehand if you are suspicious; but escape is always easy.

Corsica provides the simplicity or sophistication you desire, from the Hôtel Napoléon Bonaparte at L'Île-Rousse, with one servant for every two bedrooms, each with bath, to the Hôtel Moderne at Calvi, thirteen bedrooms and one bath, yet the cleanest and kindest atmosphere one could ever wish for.

Corsica's charm is that it demands that you make your own decisions. You have to decide what you want. Like you it is in search of itself, exploring its past, competing with the present. Having no industries it has no idle dreams for the future.

You return, knowing that the farewells were touched with genuine sadness, and with you is a confused but happy picture of snow-capped mountains, pine woods, golden forests of chestnuts, turbulent mountain streams where the trout are not too sophisticated, a kindly people and lastly the glorious bathing beaches. But note that they come last. The island has held its own against them.



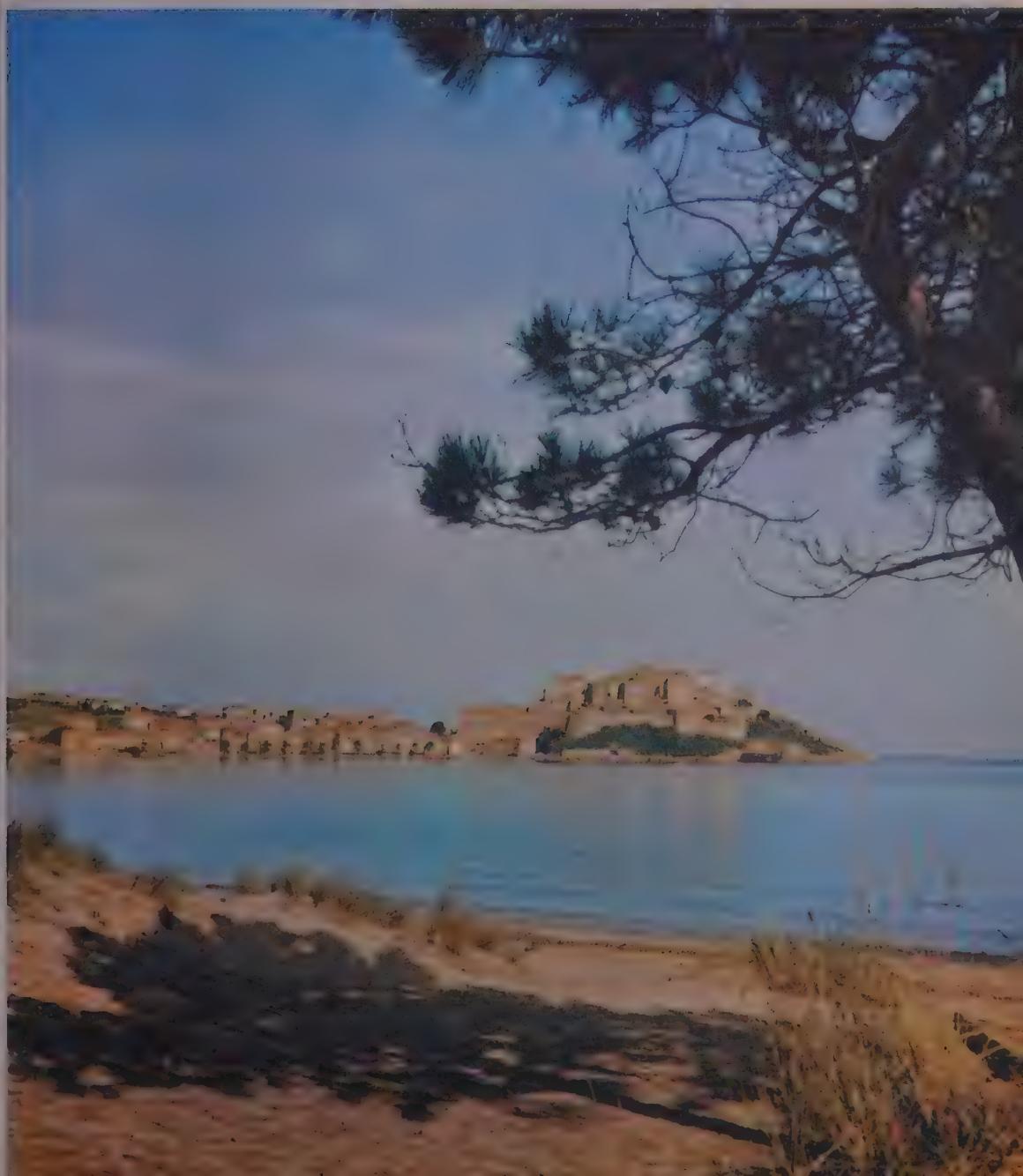
All Ektachromes by R. T. L.

The bay of Ajaccio is sheltered from northerly winds by a protective range of mountains. Its harbour bustles with pleasure-craft and yachts, and the work of the fishermen is unceasing—never, you would think, have nets been so carefully examined and maintained. Here you find boats to take you to the îles Sanguinaires or to the far side of the bay, where you can choose your own bathing beach. In the distance lies one of the comfortable ships which bring passengers and cargo from Marseilles or Nice on a pleasant overnight trip.



Corsica's "Greek city", Cargese, is thirty miles north of Ajaccio on the road to Piana and Porto. It is the home of Greek colonists from the Mani who emigrated to Corsica in 1676, refugees from the Turkish invaders of their homeland. Their hereditary leaders claim descent from the Emperors of Trebizond. Envied for their prosperity, and mistrusted by the Corsican nationalists because of their loyalty to the Genoese overlords, their first village was burnt and they fled to Ajaccio in 1731. It was not until seven years after Corsica became French in 1769 that they settled in Cargese, which had been built for them by the island's new rulers

Calvi, ancient fortress-city on the north-west coast of Corsica, remained faithful for five centuries to Genoese rule, heroically resisting two murderous sieges in the 16th century when the town was attacked by French and Turkish troops, allied with Corsican nationalists. It eventually fell to Hood in 1794, after a violent struggle during which Nelson lost an eye. Prince Youssoupov 'discovered' Calvi during the twenties, and it is now the island's most fashionable resort





Only a few miles in length, the road from Piana to Porto is justly claimed to be one of the most spectacular features of Corsica. The Calanques, curiously weathered red granite rocks, tower around you, sculptured by the winds into strange shapes: a monk, a bishop complete with mitre and cross, an elephant, even the features of a former French president. Then, suddenly, the landscape changes and you gaze down upon the spacious Gulf of Porto. You stop, and your eyes wander over a Genoese watch-tower—one of the few that are square—to the little group of houses and hotels which make up Porto; this is surely one of the most satisfying views in the world



Hunting with Cheetahs

by

MILDRED
ARCHER

All illustrations, except one, by courtesy of the India Office Library

TODAY the verb "to hoodwink" implies mental blindfolding or humbugging. But in the 18th and 19th centuries it had very different meanings and associations for British men and women who had been to India. For them it was part of the process of cheetah hunting and recalled the excitement of swift "hunting-leopards" bounding through the countryside in pursuit of antelope and deer.

Both caracals and cheetahs have been used for centuries in India as hunting-animals. The caracal, with its sandy fawn fur, broad head and long tufted black ears like a lynx, was common in north India, in Sind, Cutch, the Punjab, Rajasthan, U.P. and central India. It was easily tamed to hunt small deer, gazelle, hares, foxes, and birds such as peafowl, cranes and pigeons. It had such perfect accord of eye and foot that it could spring out from its hiding-place in one great cat-like bound and kill its prey.

The cheetah (*Acinonyx jubata*) had other qualities. It could crouch, stalk and pounce like a cat, but also pursue its prey across open country like a dog. It is in fact the fastest of all land animals and for short distances can run at a speed of seventy miles an hour. It has been found to cover half a mile in twenty seconds and a hundred yards in four and a half seconds. Its lithe body is admirably adapted for running; for it has a deep chest, long sinewy legs, powerful hindquarters and hard pads on its feet. With its small round head and dome-like cranium, its tawny buff-coloured skin covered with close-set black spots and its tail bushy at the tip, it is a completely different shape and colour from an

ordinary leopard. It attacks larger animals than the caracal does—deer and antelope being its main prey—while in its wild state it pursues sheep and goats. For centuries cheetahs have been employed for hunting in India and there are vivid literary and pictorial records of the sport dating from the 16th century.

The Emperor Akbar, a contemporary of Queen Elizabeth I, was particularly fond of cheetah hunting and his biographer, Abu'l Fazl, has left fascinating descriptions of it during the reign of his master. He tells us that Akbar first watched the sport in 1555, when he was a boy of thirteen. He was touring in the Punjab when he was presented with a trained cheetah which had been captured from the Afghans. It was called Fatehbaz or "The Gamester of Victory", and came to him with its keeper, Dandu.

This cheetah was the first of many and its keeper was to become one of Akbar's favourite huntsmen. Gradually Akbar built up a great establishment of cheetahs. They were captured for him in several ways. Pits covered with grass were the commonest form of trap. When news came that a cheetah had been caught, Akbar would ride out to see that it was recovered with care and handed straight to the trainer. On one occasion a female cheetah was being followed by six male leopards. The female fell in the pit and her six admirers tumbled in after her. "A nice scene, indeed," comments Abu'l Fazl. But Akbar was worried by the fact that cheetahs sometimes escaped from the pits or broke their legs. He therefore devised a new method of catching them



One of the methods of capturing cheetahs. The Emperor Akbar helps to lift a cheetah from a trap-door pit; another cheetah, which has just been caught, is being carried away in a cage. This miniature, painted in about 1600, is an illustration to the *Akbarnāma*, or "Annals of Akbar"

with a trap-door over a pit six to nine feet deep, which would close after the animal had fallen in. Cheetahs were also caught for him in other ways—sometimes by chasing them until they collapsed from fatigue or by attaching nooses to trees where they were known to come and sharpen their claws.

It normally took two or three months to train a cheetah, but Akbar planned a new way by which his animals were ready for hunting in eighteen days. "Old and active keepers were surprised at such results, and extolled the charm of His Majesty's knowledge." There was no doubt that Akbar had a strange power over animals and it was related how a hunting-leopard without any previous training brought him its prey "on a mere hint", and it was said that another once

meekly followed him without a collar or chain and obeyed his every command.

Akbar kept a thousand cheetahs with two hundred keepers. Both animals and men were highly organized. The cheetahs had names which indicated some of their qualities and were grouped in sets of ten. They were also divided into classes, each animal having a particular ration of meat which varied from ten to five pounds according to its class. The cheetahs were fed with lumps of meat and given a double ration on Saturday as no animals were killed on a Sunday.

They were kept with the greatest care, their fur being rubbed with an ointment of butter and brimstone to prevent the itch and to keep it in good condition. They were given chains studded

with jewels, blankets and little Persian carpets to sit upon. On hunts they were provided with different types of transport according to their "rank". Some rode on horses with brocaded saddle-cloths, some sat on carts and others were carried in little palanquins on the backs of elephants, camels, horses or mules. The best "leopard" of all was carried in a *chaudol*, an elegant gilt and velvet palanquin, its servants running at its side and a great drum being beaten in front of it. Sometimes the *chaudol* was carried with its poles resting on the necks of two horses. This honoured cheetah was known as Samand Manik or "The Bay Jewel".

Cheetahs that rode on horseback were looked after by groups of three men, while two were allotted to those on carts and palanquins. The keepers also had to superintend the cattle who pulled the carts. Pay for keepers ranged from five to thirty rupees a month and prizes were awarded if their charges excelled. Grandees of the court were in charge of the different classes of cheetah and it was their responsibility to add new animals to the establishment and to see that they were well dressed with their equipment kept clean and bright. Their post was enviable for they made large sums of money through organizing bets on their charges.

Cheetah hunting was practised by most Indian rulers; one who was particularly devoted to it was Tipu Sultan, ruler of Mysore from 1782 to 1799. There was almost certainly a psychological reason for his addiction to the sport, for he was obsessed with tigers. He adopted them as his armorial bearing, their stripes appearing on the clothes of his soldiers and his own family, while his throne, guns and weapons assumed this form. Nor must we forget his Man-Tiger-Organ (now in the Victoria and Albert Museum, London) on which he played and which symbolized his triumph over the hated British.

The cheetah's method of attacking its prey and its whole feline nature must have given Tipu Sultan great satisfaction, perhaps reminding him of his own triumph over enemies. So strong was his interest in cheetah hunting that when he was killed at the Siege of Seringapatam in 1799 and his palace captured by the British, Captain Benjamin Sydenham, an A.D.C. to Marquis Wellesley, was set to record Tipu's method of cheetah hunting for despatch to the Directors of the East India Company. This document, which is now in the India Office Library, describes how Tipu possessed sixteen trained cheetahs and preserved a tract of land with hunting-lodges south-west of Seringapatam

A cheetah standing beside its equipment—a cloak, hood and wooden spoon. In the distance is its cage on a bullock cart. A water-colour from the set of animal studies, *Hindoostan Quadrupeds*, made for Marquis Wellesley round 1800, when he was Governor-General of Fort William in Bengal





A young nobleman driving his cheetah to a hunt on a bullock hackery while the keeper follows; this cheetah must be well trained for it wears no hood or harness. A Moghul miniature of about 1615

specially for this sport. Each cheetah was accompanied by four men—a huntsman, two keepers and a bullock-man with his cart and four trained bullocks. When Tipu had decided to hunt, the cheetahs would be sent ahead, each cheetah riding on its hackery with its attendants running alongside. The next morning at daybreak, Tipu would set off with a small party of friends. They would then meet the huntsmen and form a long procession, the hoodwinked cheetahs sitting on their carts, and the sportsmen keeping close and moving as silently as possible. When the game—usually antelope or deer—was sighted, the huntsmen would manoeuvre the carts so that the game would be forced to run uphill or across broken ground. When about five hundred yards from the game, a huntsman would remove the hood from one of the cheetahs and untie its ropes, or if the herd was large, from two or three cheetahs. The beasts would then leap down from their carts, but proceed very cautiously at first, crouching behind bushes, until they were about two hundred yards from their prey and exactly behind them. Then came the exciting moment. They would give chase, bounding along at a tremendous speed. The cheetah would usually catch its prey in the course of three or

four hundred yards, felling it with a powerful stroke of its forepaw. If unsuccessful in that distance, it would give up the chase and prowl sulkily around until its keeper came up, hoodwinked it and led it back to its cart. If, however, it had been successful, the cheetah would hold its prey down by the neck until the huntsman arrived, who would then hoodwink his charge, cut off a leg of the prey and give it as a reward to the cheetah before leading it back to its cart. Cheetahs could be run like this two or three times a day and sometimes they were trained to take the antelope or deer alive.

This method of hunting was by far the most spectacular and exciting. But sometimes the nature of the country and position of the game forced the keepers to use other techniques. Two of these are described by a friend of James Forbes, the writer of *Oriental Memoirs*, who was in India from 1765 to 1784. "If the cheeta finds that he cannot proceed undiscovered, or if he perceives the game to be alarmed, he crouches, and lies close to the ground; thus posted the hackeries take a circuit, leaving the cheeta, and getting on the other side of the antelopes; and then, edging down, urge them towards the ambuscade, which if they pass within the

distance of seventy or eighty yards, there is every reason to expect success.

"A third method is in bare and open country, where we are frequently obliged to follow the game sometime before we can get within distance; in which case the huntsman studiously avoids getting to windward; and endeavours by traversing to force the antelopes to run across him, at which time the cheeta is most likely to follow them; for, although he may be previously

within distance, he generally hesitates, even when unhooded, to quit his cart, if the game is standing still, or looking towards him when he has no cover to conceal himself."

Akbar, with his large establishment of cheetahs, sometimes used a fourth method. He would have an area, known to be frequented by game, surrounded by beaters and huntsmen with cheetahs, who would gradually close in. At a given signal the hunting-leopards were all

A cheetah patiently waiting for the hunt, wrapped in a cloak and with its eyes hoodwinked. On the ground lies a large wooden spoon used by the keeper for giving blood to the cheetah in order to persuade it to drop its prey. Another water-colour from the collection of Marquis Wellesley





Akbar takes part in a *chatrmandal*, an exciting method invented by him of hunting with cheetahs. In this illustration to the *Akbarnāma*, animals have been driven into a palisade. The beaters stand outside the fence watching the end of the hunt



By courtesy of Brigadier-General Sir Robert Pigot, Bt

An oil-painting by George Stubbs, made about the year 1765 to commemorate the presentation of a trained hunting-cheetah to George III by Lord Pigot, Governor of Madras. Its two Indian keepers have taken off its hood and are urging the proud creature to bound off in pursuit of its quarry

let off their leashes. Sometimes a palisade was built into which the cheetahs would chase their prey.

There were at least two occasions when trained cheetahs were seen in England. After the Siege of Seringapatam, Marquis Wellesley sent three of Tipu's cheetahs as a present to George III. They were accompanied by their six keepers (three of them old employees of Tipu's) and all the necessary equipment for hunting including a cart and two trained bullocks. But George III does not appear to have experimented with these creatures and no demonstration of their skill was staged. They were allowed to live in peaceful captivity.

This was probably because the King remembered a previous occasion when he had been presented with a trained cheetah. Lord Pigot, Governor of Madras from 1755 to 1763, had sent him one as a gift together with two Indian

keepers. Arrangements were made for it to show its prowess by hunting a stag in Windsor Great Park. But a huge crowd had gathered and the cheetah was too terrified to move. The only outcome of its sojourn in England, perhaps a more valuable one, was the fine portrait which Stubbs painted for the Pigot family. The graceful alert creature is shown with its hood pushed back and its two keepers tending it.

This behaviour of the cheetah at Windsor was not surprising for their temperamental nature was well known. In the memorandum on Tipu's cheetah hunting sent to the East India Company, Dr Fleming, a Company Surgeon in Calcutta, who was keenly interested in natural history, contributed a note on these creatures. "The Cheetah", he wrote, "is easily broken in and trained for the Chase. I have never seen one, however, that could be said to be thoroughly tamed. It still retains some share of its natural

ferocity and treachery, which it betrays by its restlessness, the obliquity of its movements, and the duplicity of its looks. It suffers no-one to approach it familiarly but its keeper and even he caresses it with caution and diffidence. It must be led to the Chace chained and hood-winked and all that can be expected from it, even when it has been carefully trained, is that it should return quietly to its Keeper when the Chace is over."

This character of the cheetah is often commented upon in accounts of cheetah hunting. Raja Serfajee, a young ruler of Tanjore in South India from 1798 to 1832, also kept a hunting-establishment and sent pictures of his animals to England. In a note to one picture, he remarks that although young cheetahs could be taught to hunt very quickly, older ones take two years to learn. They must, he says, be taken for an hour's ride every day through the streets and markets so that they may become accustomed to crowds of people. He admits that if a cheetah fails to catch its prey it becomes very fierce and cannot be got back to its cart without flesh. It was only the magnetic Emperor Akbar, according to his chronicler, who could leave his cheetahs loose without hoods and chains after a day's hunting.

Cheetahs were occasionally known to turn their attentions to human beings if their tempers had been soured by missing their prey. Captain Williamson, the author of *Oriental Field Sports* (1807), described his first cheetah hunt, when he knew very little about their precarious temperaments. "I was unaware", he wrote, "of the propensities of these animals to follow horsemen or any other moving object, when the game might accidentally escape out of sight, or else I certainly should have been more diffident on this occasion." However, he was fortunate and the cheetahs disregarded him as he enthusiastically rode around and followed the hunt.

It was not only Indian rulers and landlords who kept cheetahs. A few Europeans who had become thoroughly Indianized also kept them. The friend of James Forbes, whose account of a cheetah hunt has already been quoted, clearly had his own establishment. Colonel Gardner, an Englishman who had married an Indian lady of the Delhi royal house, and lived at Khasgunge, sixty miles from Agra, also kept his cheetahs. Fanny Parkes, the wife of a Company Collector, who left two large volumes of racy memoirs, referred to a cheetah hunt when staying with him in 1835. In her diary for

March 3, she described this event. It was a hot day—too hot for her to walk—so she decided to ride on a cart with one of the cheetahs. Climbing on the cart, she sat down by accident on the creature's tail. "O-o-o-wh, growled the cheetā. I did not wait for another growl," she wrote, "but released his tail instantly. The bullock hackery was driven into the midst of the herd. The bandage was removed from the eyes of the cheetā, and the cord from his body: he dropped from the cart and bounded, with the most surprising bounds, towards an immense black buck, seized him by the throat, flung him on the ground, and held him there. The keepers went up, they cut the buck's throat, and then they cut off the haunch of the hind leg, and, dipping a wooden spoon into the cavity, offered it full of blood to the cheetā. Nothing but this would have induced the cheetā to quit the throat of the buck. He followed the men to the cart, jumped upon it, drank the blood, and the men then put his bandage over his eyes." The party moved off again, and Fanny Parkes continued: "The cheetā was leaning against me in the hackery, and we proceeded very sociably. Another herd of antelopes went bounding near us, the cheetā's eyes were unbound again, and the rope removed from his loins; a fine buck passed, we expected he would instantly pursue it as usual, but the animal turned sulky, and instead of dropping down from the hackery, he put both his fore-paws on my lap and stood there two or three seconds with his face and whiskers touching my cheek. O-o-o-wh-O-o-o-wh, growled the cheetā!—my heart beat faster, but I sat perfectly quiet, as you may well imagine, whilst I thought to myself, 'If he seize my throat, he will never leave it until they cut off my hind quarter, and give him a bowl of blood'." In a picture of a hunting-cheetah made by an Indian artist for Marquis Wellesley, the animal is shown sitting somewhat disconsolate in its scarlet-and-blue cloak, a scarlet hood over its eyes and an enormous wooden spoon by its side. No wonder Mrs Parkes felt apprehensive.

Today cheetahs, which formerly were found over most of India, have become almost extinct. The few Indians who still maintain them are obliged to import the animals from Africa. The gradual impoverishment of rich Indian families has forced them to abandon these luxuries and it is only in a very few areas, such as Kolhapur, south of Bombay, that the exciting practice of cheetah hunting persists.

Explorations in Patagonia

by ERIC SHIPTON



All photographs from the author

In the June 1957 number Major Tilman described his expedition to Lago Argentino over the glaciers from the Pacific coast. Now another famous mountaineer explores the same region from the Atlantic side. The little lakeside town of El Calafate (above) was Mr Shipton's "jumping-off point"

THE term Patagonia refers to the South American continent south of the 42nd Parallel, on either side of the border between Chile and Argentina. The larger part of it, on the eastern side, is flat or undulating, dry, treeless and covered with coarse grass. But the western part is completely different; indeed there is nothing quite like it elsewhere in the world. A labyrinth of fjords split the Pacific coast, bite deep into the mainland and form an archipelago composed of hundreds of islands, most of them uninhabited. There is a similar pattern of lakes on the opposite side, many of which, Lago San Martin and Lago Buenos Aires for example, though lying well to the east of the main range of the Andes, are drained by rivers flowing through it into the Pacific. Innumerable glaciers radiate from huge ice-caps and thrust their massive fronts into the intricate system of waterways surrounding them. That so much of the region remains unexplored is due almost entirely to its physical difficulties, for during the last sixty years many attempts have been made to penetrate it. Most parts of the main range, even on the eastern side, can only be reached by amphibious operations which

are liable to be rendered hazardous by the violent and prolonged storms that prevail. The glaciers in their lower reaches are often so broken and crevassed that it is impossible to travel on them; lateral moraines rarely offer an easy line of approach, and the forest which covers all but the steepest slopes and extends to an altitude of about 3000 feet is usually dense, trackless and difficult to negotiate. Except on parts of the ice-caps where sledges might possibly be used, back-packing is the only means of transport, and no porters can be hired locally to help with this. But the chief problem is presented by the prolonged periods of rain, the rarity and brevity of spells of fine weather and above all the savage wind-storms which sometimes continue for weeks at a stretch, with gusts up to 130 m.p.h. It is these obstacles which have prevented most expeditions from achieving more than a limited objective or covering more than a very small portion of this large and exceedingly complex field.

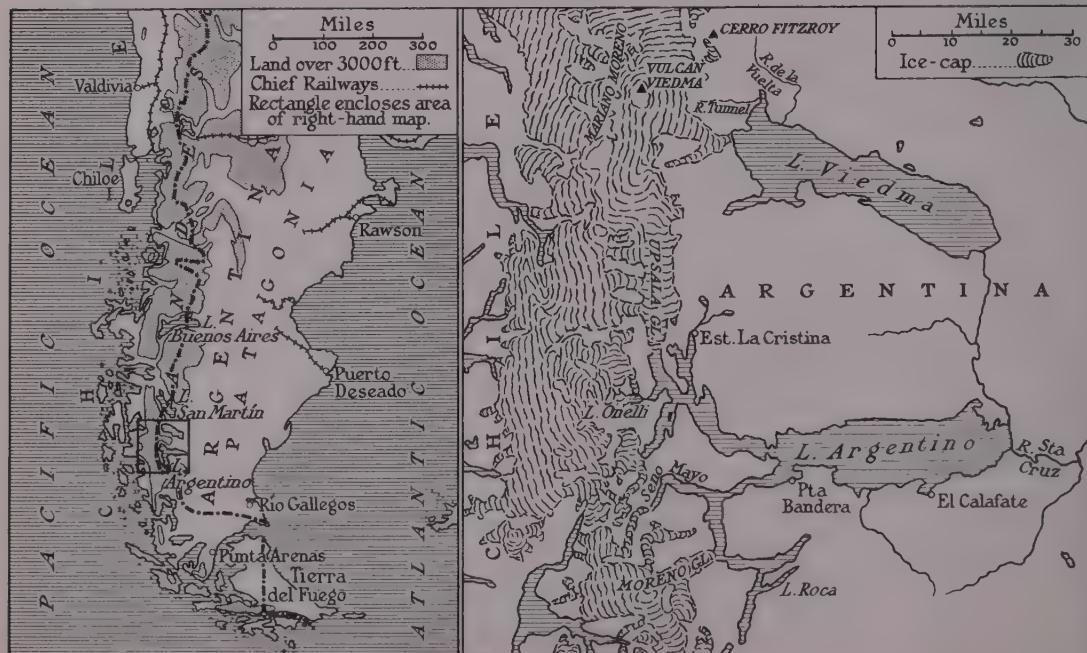
The chief objects of the small expedition which I took to the Patagonian Andes during the 1958-59 season were to make botanical and

zoological collections and glaciological observations in the neighbourhood of Lago Argentino and Lago Viedma, which lie on the eastern slopes of the Andes, close to the border. I hoped also to penetrate some of the unvisited parts of the region. My companions were Geoffrey Bratt, who shared with me both the initiative and the organization and took charge of the glacier surveys; Peter James, botanist from the British Museum; John Mercer, glaciologist; and Peter Miles, who joined us in Argentina, to help with local arrangements and to collect birds and insects. Later we were joined by two Argentine mountaineers, Barney Dickinson and John Cotton. Our general plan was to work from a series of bases at the heads of some of the western arms of Lago Argentino. To establish these we relied upon using the government launch which operates on the lake. We also proposed to travel north to Lago Viedma. The Shell Company of South America very generously placed a Kayser station-waggon at our disposal. Miles, Bratt and Mercer drove it the 1700 miles or so from Buenos Aires to El Calafate, while James and I travelled there by air, arriving early in December.

In shape the outline of Lago Argentino resembles a squid. The main body of water, which drains eastward into the Río Santa Cruz, is 40 miles long by about 15 miles wide.

Two channels run westward from this, and subdivide into eight sinuous tentacles. Some of the fjords so formed are more than 30 miles long. The country surrounding the main lake is treeless, covered with coarse yellow grass, and rises gently from lake-level at 600 feet to hills and undulating plateaux about 3000 feet high. The little town of El Calafate, which lies near the southern shore, is a centre for all the sheep *estancias* in the district. Westward of the main lake the country changes abruptly. The sides of the fjords are steep and largely covered by *nothofagus* (a kind of beech) forest. Several large glaciers flowing down from the main range discharge their ice into the fjords; icebergs breaking away from these spectacular glacier fronts drift through the channels to the main lake and occasionally reach its eastern shore. One of these glaciers, the Moreno, thrusts its front right across one of the fjords and from time to time dams back the water beyond. Various theories, none very convincing, have been advanced to account for the curious fact that of all the glaciers in the region, the Moreno is apparently the only one not in a state of active retreat.

Some of the *estancias* around the lake are owned by companies employing salaried managers, but most of them are privately owned and run. These have an average of about eight





The homestead of a Patagonian sheep-farm: Estancia Lago Roca, which is situated on the shores of one of the south-western tentacles of the squid-shaped Lago Argentino in the Southern Andes. Its owners, Mr and Mrs Atkinson, gave a warm and hospitable welcome to the author and his party

thousand sheep; though as the land can carry only one sheep to about four acres, each ranch covers a very wide area. Labour on the estancias presents a considerable problem; most of the shepherds and farm-hands come from Chile. The settlers come mainly from various parts of Europe, and one can still meet many of the original pioneers who came there before or about the turn of the century to make their homes in a wild, almost uninhabited land with nothing but their own courage, skill and ingenuity to help them and ensure their survival. A regular air service from Buenos Aires and motorable roads have, of course, made an enormous difference to the lives of these people, giving them comparatively easy access to the outside world and transport for their produce to coastal ports which did not even exist when some of them first arrived. But some of the farms are still very remote. La Cristina, for example, owned by Mr and Mrs Percival Masters, lies at the head of one of the north-western arms of the lake and is accessible

only by several days' rough marching across the mountains to the east, or by boat from Punta Bandera on the southern shore of the lake. With the wonderful generosity so typical of these people the Masters invited us to stay with them as long as we could and placed their house, their steam-launch and all the resources of their ranch at our disposal.

La Cristina was a most agreeable place in which to start our work. It is beautifully situated near the lake shore at the southern end of a wide valley flanked on the east by forested slopes rising in a series of terraces to a range of barren mountains which, though 6000 feet high, lie beyond the zone of heavy precipitation and hold little permanent snow. The head of the valley, dominated by the sharp spire of Cerro Norte, is filled by a lake some five miles long, while scores of smaller lakes are cradled in the wooded terraces on either side. Rainbow trout abound in these lakes which in the spring are the breeding-grounds of vast numbers of water-fowl such as



(Above) The Estancia La Cristina in the valley overlooking the north-western arm of Lago Argentino, with Cerro Norte's snow-capped peak behind. Here, too, members of the expedition were generously entertained by the owners, Mr and Mrs Masters. The estancia is most easily reached by water and its steam-launch was put at the disposal of the climbers who had also brought with them (left) an inflatable "Dolphin" tender, seen with Eric Shipton aboard. During the early part of the expedition it had an outboard motor which was invaluable. A submerged ledge of iceberg, however, soon sent the motor to the bottom. Then they had to row



All Kodachromes from the auth

The Upsala Glacier is one of the largest in Patagonia. After leaving the ice-cap it maintains an average width of some six miles and reaches the north-western branch of Lago Argentino on a front two miles long. The ice-cliff above the water-front is between 200 and 300 feet high, and it is continually calving to form massive icebergs which drift down the lake and occasionally reach its eastern end, seventy miles away. Some of the icebergs are formed in fantastic shapes—towers, cliffs and caverns—which often appear an unnatural blue. Sometimes weird noises emanate from one or other of these monsters; it begins to pitch like a ship in a rough sea and occasionally the whole mass turns turtle. The Upsala Glacier has retreated considerably in the past seventy years or so since it was discovered. When Mr Masters first came to the area the ice flowed over part of the ridge (shown on the right of the picture) dividing it from the valley of La Cristina





(Above) This hole through one of the ice ridges on the lower part of the Mayo Glacier once formed part of a *moulin*: a pit, perhaps a hundred or two hundred feet deep, drilled more or less vertically into the level ice higher up the glacier by the action of a surface stream. The section with its hole has since been severed from the original pit and stood up on end by the contortion of the ice brought about by lateral pressures. (Opposite) "The barrier formed by the end of the Mayo Glacier was more formidable than we had expected; everywhere the ice was broken into a chaotic labyrinth of sharp ridges and spires intersected by deep crevasses . . . Hours of strenuous acrobatics resulted in little apparent advance, and it was impossible to choose a route for more than a few yards ahead"



(*Above*) A tributary of the Onelli Glacier. (*Below*) Camp in a valley near the Upsala Glacier. The lateral moraines in the centre of the picture show how it has receded. They can be dated by examining trees pushed over at the maximum glacial advance while they were forming: most recently in about 1880





Lago Onelli, showing the accumulation of floating ice at its further end, and, beyond it, the north-western arm of Lago Argentino, from the summit of an 8000-foot peak of the Southern Andes

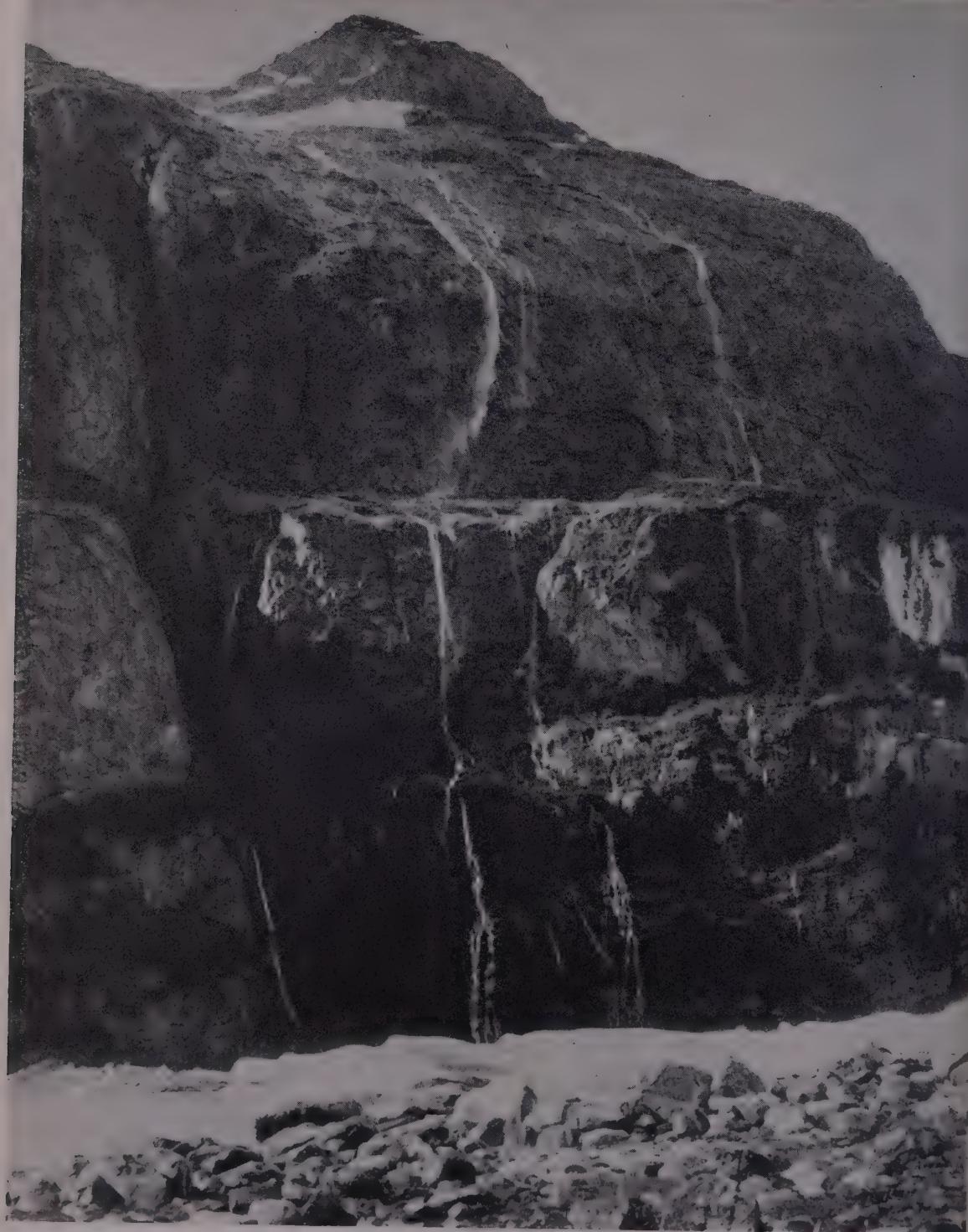
teal, steamer ducks, snowy upland and ashy-headed geese. To the west the valley is contained throughout its whole length by a low ridge which separates it from the vast ice-stream of the Upsala Glacier.

In the last week in December we left La Cristina for Lago Onelli to investigate the glaciers coming down from that part of the main range. We had brought with us from England an inflatable rubber boat about eight feet long and an outboard motor which we used both for getting round difficult bluffs along the shore and for transporting supplies to the head of the lake. One evening when Miles and I were returning from one such journey, we hit a submerged ledge of an iceberg; the motor was torn from its fastening and sank to the bottom. Thereafter we had to row. On another occasion we narrowly escaped losing much of our equipment which we had dumped on the shore, and which was nearly washed away by the waves caused by enormous masses of ice calving off a glacier front on the opposite side of the lake.

One of the most striking features of this country is the close juxtaposition of forest and ice. We would step from the dazzling glare of

an ice-fall straight into the dark shade of trees eighty feet high. Another thing that never quite lost its strangeness for me was the sight of flocks of parrots flying over those glaciers, uttering the same raucous cries that hitherto I had associated only with Indian jungles and such places. The occasional humming-birds we saw also seemed somewhat out of place in this environment. The most common birds in the forest were wrens: they used to perch a few feet away to scold us wherever we went. A species also much in evidence was a woodpecker, the male of which was crested with a beautiful red cockade.

Since the discovery of the great lakes of Southern Patagonia, there have been several reports of volcanic activity somewhere in the vicinity of the ice-caps, but though the accumulation of evidence is fairly strong there is no definite proof. However, Professor Keller and Dr Lliboutry of the University of Chile were convinced from aerial reconnaissance that an eruptive vent existed in the upper basin of the Viedma Glacier at the eastern foot of the Mariano Moreno range, and the place was marked on some maps as "Vulcan Viedma". When we returned to El Calafate from Onelli,



A precipice above the end of the Mayo Glacier. When the wind is strong the waterfalls are sometimes caught by gusts which sweep them upwards as spray so that the cliffs seem to be smouldering

while James and Miles were continuing their collecting in the south-western section of Lago Argentino, Bratt, Mercer and I went north to investigate this phenomenon. We travelled in the station-waggon along very rough roads to the western end of Lago Viedma, and then along the northern shore. On the way we saw a large number of guanaco (an animal resembling a llama) and rhea (the South American equivalent of the ostrich) and a few armadillos. From the Río de la Vuelta, where we left our vehicle, we made our way up the Río Tunnel, whence we climbed to a pass 4300 feet high, leading directly onto the Viedma Glacier. From this point the Viedma Glacier appears as a vast sheet of ice descending gently from the huge plateau of continental ice of which it forms a kind of lobe. It penetrates the eastern rim of the plateau as an ice-stream nearly ten miles wide, contracts rapidly and reaches Lago Viedma, twelve miles to the east, with a front of about two miles. The general altitude of the plateau itself is about 6000 feet, but it is intersected by a number of ranges, of which the Cordon Mariano Moreno, stretching some fifteen miles from north to south and containing peaks up to 11,600 feet, is one of the most prominent. We had no difficulty in identifying the "Vulcan Viedma" lying close under the eastern flanks of this range; it looked like a long island standing above a sea of ice, and it was the only feature of its kind for miles around. We set out towards it from the pass, carrying enough food for eight days. Three or four miles from the side of the glacier we came to a place where pumice was scattered over the surface of the ice in the form of an ordinary morainic deposit. Though the area it covered was several miles wide, we found none anywhere near the Vulcan, and it was clear that wherever it came from it was not from there.

We were lucky to have a spell of comparatively fine weather for the outward journey. As we went across the ice we watched dense banks of cloud pouring over the Mariano Moreno range from the west. So closely did they cling to the contour of the mountains, so sharply was their edge defined against the blue sky, that they might easily have been mistaken for part of the ice-cap, but for their rapid movement as they cascaded across the main divide, plunged down the eastern side and vanished. We reached the Vulcan late in the evening of January 16 and that night the weather broke. Had it done so twelve hours earlier we would have had a very

rough time indeed trying to reach our objective. As it was we camped for the next three days under the lee of a massive boulder which, with the main ridge of the Vulcan, gave us some protection from the storm. When we ventured away from this we encountered winds of extreme violence. The temperature was well above freezing-point so that the driven snow melted as it came into contact with our clothing, and in a very short time we were soaked through. However, we managed to make a thorough investigation of the Vulcan. It is in fact an ordinary *nunatak*, a peak jutting out of the continental ice, $3\frac{1}{2}$ miles long and perhaps a mile wide, composed mostly of sedimentary and metamorphic rocks, and we found no evidence whatever of any volcanic or thermal activity, present, recent or past. The question of the existence of active volcanoes somewhere on the ice-cap therefore remains unresolved. Apart from the previous evidence, some of which our visit to the Vulcan Viedma had refuted, we must now account for the origin of the pumice that we found on the Viedma Glacier. I believe it to be most improbable that this comes from old beds of volcanic debris exposed by glacier action.

We returned to El Calafate on January 27, and on January 31 the whole party, including Dickinson and Cotton who had now joined us, was landed at the head of the Seno Mayo with food supplies for four weeks. This is one of the most spectacular fjords of Lago Argentino. It lies between precipitous forested slopes, intersected by glaciers so steep that it looks as though a slight disturbance would cause them to plunge bodily into the lake. At the head of the fjord, overshadowed by the magnificent rock spire of Cerro Mayo, the valley is blocked by a great ice-stream (the Mayo Glacier) which crosses it at right-angles and butts against its northern wall. Beyond this, the valley continues westward and bites so deeply into the main range that its actual head is only about six miles from the waters of one of the Pacific fjords. Apart from the botanical, zoological and glaciological work, our chief object was to find a way into the basin of the upper valley beyond the Mayo Glacier, to explore it and, if time and weather allowed, to cross the range to the Pacific side. We pitched a camp in the forest on a wide spit of land jutting out from the southern side of the fjord and this delightful spot acted as a base for James and Miles. But we found it

impossible to reach the glacier from there, so on the following day I ferried the rest of the party with equipment and two weeks' food over to the northern side, an operation rendered so complicated by a powerful and very warm wind that it took us most of the day. These warm winds were invariably the harbingers of storm, and during the next few days the weather was very rough.

The barrier formed by the end of the Mayo Glacier, though less than two miles wide, was more formidable than we had expected; everywhere the ice was broken into a chaotic labyrinth of sharp ridges and spires intersected by deep crevasses. We made two attempts to find a way across, but our progress was so slow that each was abandoned before we had reached the middle. Then, on one of our few fine days, Dickinson, Bratt and I climbed to a prominent spur running down from Cerro Mayo. From there we looked down a vertical precipice of some 2000 feet to a lake beyond the ice barrier. We had a clear view of the southern side of the basin and of a fairly low gap leading westward to the Pacific. But the ground beyond the bluff looked so precipitous that we decided to attempt a high-level route into the upper valley basin

only as a last resort. The following day Bratt and I made another attempt to cross the glacier. We kept close to the rock wall against which the glacier front was pressing. Sometimes we were able to use rock ledges, and at one place we made a valuable advance of 200 yards by passing through a tunnel under the ice. At length we reached a narrow inlet from the lake beyond, which lay between a mass of impassable ice-cliffs and a sheer rock wall. The only chance of making further progress was by using the boat. But the inlet was so closely packed with small icebergs that we were very doubtful whether we could force a way through. However, we decided to make the attempt and the next day we returned with Dickinson, carrying our food and equipment and the boat. It was less than 300 yards to the opposite shore of the inlet, but it took us four hours of very hard work to get there. Our main worry was that the boat would be punctured on some jagged edge of ice as we heaved the icebergs apart to make a channel and chipped at submerged ledges with our ice-axes. It was late in the evening when we landed and we just had time before dark to fill the boat with rocks to prevent it from being blown away by the wind and to scramble up into the shelter of the

Ranch-hands in the sheep-country north of Lago Viedma. Cerro FitzRoy, in the background, is named after the Captain of the *Beagle* which charted the coast of Patagonia on its famous voyage





A "dirt cone" on the Viedma Glacier, caused by a layer of pumice which protected the ice beneath it from the sun. Usually such cones are caused by moraine left by glaciers. The existence of volcanoes reported in this part of Patagonia was not proved, though confirmatory evidence was found

steep forest where we spent the night.

We had hoped to complete the journey to the head of the main valley mostly by boat so as to avoid crossing the numerous steep ridges and cliffs along the shore. But the force of the wind and the roughness of the lake made this impossible, and we were obliged to make slow and very laborious progress by land. While in the forest, of course, we did not feel the wind, but the noise it made was most impressive: the individual gusts swept down the valley with a roar like that of a major ice avalanche. On the night of February 10 there was a lull and the next morning dawned calm. We had already abandoned the idea of attempting to cross the gap to the Pacific, and we now decided to seize the opportunity of the calm spell to make a long march to the head of the main valley and back without our loads. We found that here the vegetation was much more luxuriant and the trees much larger than any we had seen elsewhere; presumably this was because of the greater rainfall in the western part of the range.

On February 15 Bratt and I set out southwards to reach the head of the Mayo Glacier. Once again we plunged into the maze of seracs and ice ravines. It was exasperating work; hours of

strenuous acrobatics resulted in little apparent advance, and it was impossible to choose a route for more than a few yards ahead. Fortunately the day was fairly calm, though this gave us cause to wonder what the return journey might be like in really bad conditions. It was late in the evening when at last we broke through to relatively smooth ice, and at 9.30, very tired, we reached an isolated patch of forest at the side of the glacier. For the next thirty-six hours it rained heavily and without stopping. Then, on the morning of February 17 the weather suddenly cleared completely and for the next three days there was not a breath of wind and scarcely a cloud in the sky. We discovered an easy pass to the head of the Ameghino Glacier, and climbed to the summit of a small peak above it, where for three hours we sat and gazed at a vast panorama of nameless mountains.

The Andes of Southern Patagonia more than justified my high expectations. The three months that we spent there passed all too quickly and I left with the feeling that I had scarcely begun to know this strange and beautiful land, that we had touched only the outer fringe of a fascinating field that would always widen with every fresh encounter.

The Story of Ice Skating

by NIGEL BROWN

Nigel Brown is the author of Ice Skating—A History, which was published by Nicholas Kaye in June 1959

ON December 1, 1662, Samuel Pepys entered in his diary:

... and then over the Park where first in my life, it being a great frost, did see people sliding with their skeetes, which is a very pretty art.

The celebrated diarist, who was always on the look-out for novelties and never failed to record them, was evidently highly impressed by this new sport, for a fortnight later he accompanied the future James II to an ice-bound pond to see him skate, and in spite of the dangerous condition of the ice Pepys found that his royal companion did "slide very well".

The art of skating was new in England. When Charles II was restored to the English throne in 1660, the English exiles had brought back from the Netherlands iron-bladed skates and the skill to use them that they had learnt on the canals and rivers of Holland.

Primitive sliding over the ice on skates made from the metacarpal bones of horses, oxen and deer had been practised in England for a long time. Fitzstephen, the London chronicler of the 12th century, gives a vivid description in 1180 of this early method of skating:

When the great fenne or Moore (which watereth the walles of the citie on the North side) is frozen, many young men play upon the yce, some stryding as wide as they may, doe slide swiftly . . . some tye bones to their feete, and under their heeles, and shouing themselves by a little picked staffe, doe slide as swiftly as a birde flyeth in the aire, or an arrow out of a crossbow. Sometimes two runne together with poles, and hitting one the other, eyther one or both doe fall, not without hurt; some break their armes, some their legs, but youth desirous of glorie, in this sort exerciseth it selfe against the time of warre.



From the author

The accident to St Liedwi, patron saint of skaters, in 1396. This is the earliest skating print known, and it clearly shows the iron-bladed skate on the saint's foot

The use of a staff or pole was absolutely necessary, for it was quite impossible to make a strike from the side of this bone skate without skidding. The pole was also used for steering and braking. Early man slid over the ice in the frozen north in this same manner and there is evidence to suggest that a bone skate was used in the late Neolithic period. Such a skate may first have been used by early man as an ice-runner for his cart or simple boat in winter-time, before he found that he could fix it to his own feet. Bone runners like these were found in 1869 in London Wall. After the bone skate there is evidence of a wooden skate existing well before the Christian era.

This wooden form of skate derived from the first sledge-runner or snow-shoe and may have inspired the invention of the ski or have been created from it. The new skate or ski had curved toes and may even have been the result of an attempt to cross the snow and glide over the ice at the same time.

When iron came into general use throughout the north about A.D. 200, skating left the stage of a primitive means of locomotion and developed into an accomplishment on a footing with archery. A Scandinavian hero lamented that in spite of his ability and skill in eight exercises which included "gliding along the ice on skates" a Russian maid disdained him.

The early iron skate would not have been bladed: more probably it was just a strip fixed to a wooden block the length of a normal adult foot and would have been shaped like a boat with a pointed prow that turned upward.

An iron-bladed skate was in use in Holland by the 14th century and this made it possible to execute the "outside and inside edge", or the "Dutch Roll" as it was called, which is the beginning of all skating art. Skating was a very necessary accomplishment among the village folk of the north of Holland, for the country was threaded with canals which in winter froze hard, and skating along them was not only a

rapid but often the only way of reaching a village bogged by deep snow.

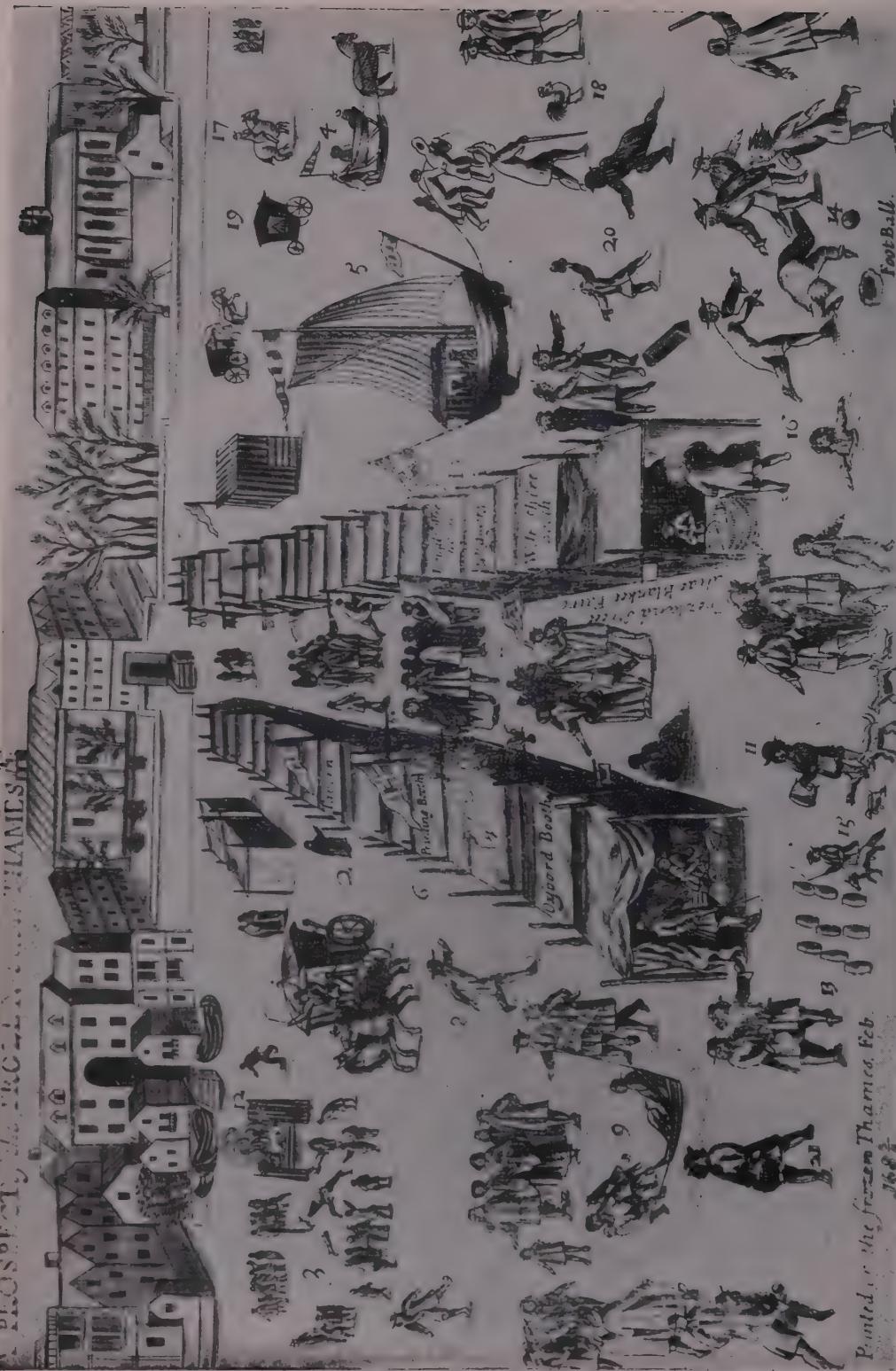
In the 16th century Dutch soldiers were equipped with skates, and because of their skill upon them a body of Dutch musketeers in 1572 were able to rout a strong force of Spanish arquebusiers. The latter, wearing spiked clogs to give them a foothold on the ice, were overwhelmed by the Dutch on their skates.

A winter scene by the Dutch painter Hendrik Avercamp. Life on ice was apparently much like life on dry land in the early 17th century; couples walked out sedately, doffing caps to the gentry. The differences in fashion show that all classes took to their skates in winter-time



*By courtesy of the
Trustees, The National
Gallery, London*

A PROSPECT of the RECENT FROST upon the RIVER THAMES.



Printed on the frozen Thames Feb
1683. 2
British Museum

“The True and Exact Representation of the Wonders upon the Water during the last unparallel'd Frost upon the River of Thames, 1683-4,”

But skating was limited to the Dutch Roll until it was transplanted into England at the time of the Restoration. There it at once became popular. Samuel Pepys's enthusiasm for the new sport expressed completely the great interest Englishmen were to take in it. It was indeed a royal pastime, for it is recorded that the Duke of Monmouth, son of Charles II, often accompanied the Princess of Orange on the ice.

When the Thames froze hard from December 1683 till the following February there were many Londoners who showed a certain skill in skating. This remarkable frost was the occasion of special festivities. A great fair was built on the frozen river and King Charles II with Queen Catherine arrived in a sledge drawn by a skater, to receive guests on the ice-bound river, among them Nell Gwyn and Samuel Pepys. Dutch sailors from a large merchant fleet anchored at the mouth of the Thames dashed up the frozen river on their skates to colour the scene and fascinate the London crowds by their skill and tricks.

This nine weeks' frost made the spectacle of skating a commonplace sight to Londoners, and during the next hundred years the pastime of skating spread in England, where the love of sport and the ingenuity of the people soon developed it.

The small size of the average English pond limited the possibilities of racing, or long-distance skating, but gliding and turning gracefully on skates in a small circumference was an enjoyment that inspired the performer to improvise and create the early turns. This led to the improvement of the skate. The original pattern, long and low-pitched, designed for travelling distances on the canals, was not suitable for quick turns and the performance of circles within a small radius, so the first English figure-skate was invented. By 1770 grooved skates were in use and a considerable number of skating movements had been discovered. They were all executed while skating forwards, for skating backwards was considered neither necessary nor pleasant.

About 1742 the first Skating Club in the world was founded in Scotland at Edinburgh. But after the 18th-century British had given figure skating its modest beginnings, it returned to the Continent as a pleasurable exercise. In France it conquered the royal court, and the frozen ponds of Versailles were the scenes of magnificent *sétes sur glace*. Marie Antoinette donned skates and showed the way for her sex to enjoy

the delights of ice skating. It began to catch on in Germany and a wave of enthusiasm for it swept into Austria.

Ever since the invention of the Dutch Roll artistic skating had appealed to the upper classes. It was the influence of elegance and good manners that gave rise to the idea of graceful movements upon the ice, as opposed to the more primitive speed racing. The latter was normally just a rough-and-tumble affair. Soldiers needed speed and so did the peasants on their way to and from market. They used skating, as had primitive man, as a means to an end.

Artistic skating truly dates from the *Grand Siècle*, when noblemen enjoyed gliding over the ice balancing one foot behind the other, striking a pose with a supple movement of the arms. Skating in this fashion was indeed in tone with the period. As it developed on these lines a science of the "poetry of motion" was discovered. This was the charm of skating and the poets soon discovered its appeal. Goethe grew passionately fond of it and found in its delightful abandon an awakening of noble thoughts. Wordsworth loved and practised skating in his native Lake District. Lamartine acquired a passion for it and expressed a wish that winter with such pleasures would be eternal. In France at the beginning of the 19th century an élite of skaters adopted a special costume suitable for the purpose: they were known as the "*Gilets rouges*" from the bright red waistcoats they wore.

On the North American continent, where skating had very probably been introduced by British Army officers during the 18th century, the first all-metal skate was invented around 1848 in Philadelphia, the cradle of ice skating in the United States. This was the beginning of a general improvement in the skate. The blade was made to run the whole length of the boot and later a means of securely fastening the skate to the boot was found.

The 19th century saw the establishment of artistic skating as a universal sport, but it is a curious fact that the English, who had first developed it and were to furnish most of its basic movements, very nearly succeeded in destroying it.

Figure skating is the official term used for artistic skating. Today it represents only a part, the basis of the art. It derives its name from the original term "figuring", as fine skating was described in the sixties of the last century when accurately tracing the designs of the figures 8



All five illustrations from the author

(Left) In the 18th century, the skater's clothes were still those of every day, though his gestures were not. (Below left) The first costumes specially intended for skating were worn by the French *Gilets rouges* in the early 19th century. So called because of their red waistcoats, the *Gilets rouges* practised skating as an art. Goethe was a passionate skater and found in it a relief from his intellectual activities. He is shown (below) on the ice in his native Frankfurt, a noble figure, aloof amidst the hazards of local coquetry





The English style prevailed at the turn of the century: it treated skating more as a science than an art. In spite of the apparent limitations imposed on them by their formal dress and deportment, the Victorians developed the advanced basic turns of modern figure skating. Their well-bred progress was upset by the arrival of the American ballet-master Jackson Haines (right) who brought onto the ice the spectacular and theatrical elements that ousted Victorian primness



and 3 upon the ice. The idea of tracing a design on the ice has fascinated skaters ever since the Dutch Roll was known. All the numerals and all the letters of the alphabet were tried by ambitious skaters. It is claimed that Wordsworth was able to cut his name on the ice, and in Germany it is recorded how a young girl accepted a challenge to a "correspondence on skates": a request and a reply were traced in a few minutes, with an elegance worthy of a hand writing with a diamond on glass. Far-fetched as some of these accounts may seem, it was this eagerness to invent and trace ambitious patterns on the ice that brought about the birth of pure figure skating.

During the Victorian era the English skater concentrated his inventive efforts upon the cutting of new figures and turns, abandoning entirely the artistic idea of free expression in skating. The inventive genius was considerable, for the turns which today are the basis of skating

art were mostly discovered and certainly perfected in England in the sixties and seventies of the last century. But Victorian austerity did not allow of any frivolity in skating. In top hats, black frock coats and trousers, with their arms glued to their sides, the poker-faced Victorian English took all the grace and poetry of motion, the essentials of the art, right out of skating.

Then Jackson Haines came to Europe. He was a North American ballet-master who had worked on the theory of employing ballet movements in skating but had failed to impose his principles on Americans. He began his tour in England and shocked the Victorians by his posing and theatricalism. His exhibitions were considered a dreadful display of immorality. But on the Continent he was a triumph. He journeyed from one capital to another in northern and central Europe, giving exhibitions. He became a guest at several royal courts. His career was meteoric. He made the greatest impression in Vienna and

Alongside specialized skating, "everyday" skating goes on. Even the police at times strap steel to their feet and, unsteady perhaps, but undeterred, ensure that order prevails on ice as on land

The Times





colorchrome

By courtesy of the Public Interest Association, Davos

Skating today combines the aesthetic and the athletic into a dazzling whole, in which pair skating is the complete expression of skating. Here, at Davos, two professionals afford a model of grace and precision



stone

Ektachrome

For a dedicated few, skating is a way of life; for others it is the pleasantest of pastimes. Some of the skaters at St Moritz may never execute a jump or win a medal; but with the apprehension of the first tottering steps behind them, they may well experience, besides the exhilaration of the winter air, something of what it must be like to fly

Much of Canada and the United States, with long and frozen winters, is ideally suited to winter sports, and skaters such as these, seen on the private rink of the Château Frontenac Hotel in Quebec, rival their opposite numbers in Europe both in enthusiasm and in technical ability

By courtesy of the Canadian Pacific Railway Com





lio Times" Hulton Picture Library

Ektachrome

Ice skating has a place for the comic as well as the athletic and the spectacular—and a high degree of skill is required to be efficiently inept on ice. Norman Wisdom, in *Sinbad the Sailor*, demonstrates that ice skating, though a serious pursuit, is not necessarily a solemn one



The Times

Competitors practising for the British Amateur Open Championship at Bury Fen, near Earith in Huntingdonshire. The large expanses of water found in the fen country are ideal for such meetings

showed the music-loving Viennese that skating should be interpreted to music. Vienna adopted his principles and became the centre of Continental skating. A struggle now arose between the two schools, the Viennese and the English. Towards the end of the century many English skaters were practising the Continental or International style, as it was called, and by 1900 artistic skating had once again triumphed.

Until 1924 ice skating, in spite of its great progress as a science, was still a lyrical expression of the poetry of motion. In the Winter Olympic Games in Chamonix that year, an eleven-year-old child burst upon the international stage to disturb the refined atmosphere of the skating world. This was Sonja Henie, a little girl from Norway. For a child to compete seemed almost an impertinence. Her athletic manner appeared out of place, but she brought youth as well and blended athletics with pure artistic skating; later she became a world champion, a show skater and a film star. Ice skating had acquired a heroine.

Since then it has progressed at an incredible pace and today athletics are the dominant feature of a top-ranking performance. High and

spectacular jumping is an essential part of it. This is made possible by the skater using to the full the sliding surface of the ice to gather great speed. The ability to land elegantly and safely and glide away allows the skater to perform a variety of gyrations in mid-air and in full flight that are impossible in any other sport or accomplishment.

The robust character of modern skating is by no means a male monopoly. As individual performers, girls pack into their exhibition programmes the full measure of athletics. Aerial grace and poetry of motion have been successfully blended in pair skating, which is the complete expression of ice-skating. Skating has become highly skilled, beautiful and thrilling, and since the war it has acquired all the dynamic qualities of a modern sport.

Climate no longer limits skating. By means of artificial ice-rinks it is practised in New Zealand, Africa and Australia as well as in North America and Europe; and those who show their skill on rinks in tropical lands should sometimes think of that frost-bound day in 1683 when the Dutch skaters came roaring up the Thames to greet the King of England and his people.

An Italian Headland

by JOHN BABER



G. Olivari

THE foothills of the Apennines come down to the coast and shelter the village from the north; there is no coastal belt of flat land. It may be partly because of this that the country seems more natural than further west at Alassio and San Remo and, we think, far more beautiful than the French Riviera. It remains surprisingly green through the hot summer months and this may be because the peasants have to take care of the grass on the terraces; a stranger might wonder why, because he will see no livestock. But, in fact, most of the peasants keep cows, which live in byres the whole time. The peasants cut their food daily and they, or their women, can be seen carrying the milk down from the mountains in the early morning. We ourselves do not keep cows, but get our milk from a peasant next door, who cuts our grass and gives us manure in exchange.

With our house, which is an old castle that has guarded the entrance to the harbour for nearly 1000 years, we acquired about eight and a half acres of terraced hillside. This is bounded on the south by a steep little valley, running down

to a cove where once the Saracens attempted a landing and a fierce fight took place. The land follows the coastline in a half-circle and gradually narrows in depth until it ends in a gate leading onto the harbour quay.

It is neither a farm nor a garden nor is it wild, but it has something of all three.

Immediately round the house, and on the battlements themselves, we grow flowers and fruit. The flowers include many of the English favourites, such as roses, lavender of really good quality, stocks, irises of several kinds, zinnias, agapanthus and most of the scarlet flowers, such as red-hot poker and salvia. Hydrangeas, pelargonium, geraniums and wallflowers do particularly well. The roses flower early but their season is much shorter than in England. Although we seldom have a frost—though, to local astonishment, there was one three years ago—we grow few flowers, except gardenia,

A castle in Liguria has become the author's home. It defended its harbour for a thousand years. Behind it is a bay where once marauding Saracens were thrown back



that cannot be grown in an English garden. On the other hand, there are no months without some flowers.

We have not been altogether successful with our fruit since the destruction of the war years, but we do grow apples, pears, peaches, cherries, oranges, tangerines, grapefruit, nespolo (a kind of loquat and delicious when fully ripe), melons, figs, strawberries and, of course, grapes.

Among the flowers and, lower down, among the olives and, still lower, on the unterraced rocky coastline are the flowering shrubs and trees which are one of the great beauties of the place throughout the year. The mimosa starts in January, the tall white heath in February, the scented pitosforo in March, the Judas trees, lilac and wistaria in April, the oleanders and magnolia in June and July, purple bougainvillea in the autumn; the broom flowers most of the year. Our neighbours grow wonderful many-hued camellias, but we have not yet succeeded with them.

The first owner of the house, after it was demilitarized in 1867, did a lot of good planting, including trees. There are pines and firs of many kinds, whose contrasting shades of green are always lovely, but never so much as when one looks down on them from the battlements against a background of sun-bright sea. The dark spears of cypress are best seen from afar off, on our neighbour's land rather than on our own. The grey-barked eucalyptus is not our favourite tree, though it adds its silvery note to the colour-range of the whole. But some of our trees are past their best. A terrible storm in February 1955 destroyed eighteen or more of the largest and damaged others, and we have some years of replanting before us.

Perhaps we love most the wild flowers that spring up, in seasonal succession, all over the hillside—the small sweet-scented narcissi, at least four kinds of orchis, the Madonna lilies, the wild gladioli, the huge Canterbury bells and the rock roses.

We have also a grotto. It is a cave, on the edge of the sea, of the height and proportions of a cathedral nave. At one time the sea flowed freely into it and it must have been rather beautiful, but some time back there was a heavy rock fall at the entrance and now there is only a little water in it and the only entrance is from the cliff by some steps. Visitors find these a little frightening; indeed, they are now choked by rotting leaves and will remain impassable until

I have finished clearing them.

We were therefore rather surprised one day, as we were about to catch the Rapallo bus, when the local agent, who arranges the letting or selling of anything, from a house or a boat to a perambulator, sidled up to us and offered us four million lire, which is more than £2000, for the grotto. We supposed that someone wanted to start a teashop, bar and bathing-establishment there, but did not enquire and merely told him that we did not do business in that casual way. Rather to our relief—for it was a lot of money and he would undoubtedly have gone higher—we have heard no more about it and the cliffside remains undisturbed.

Even our eight and a half acres would, in England, imply a considerable staff of gardeners and indeed could do so here. But we do not, nor could we afford to, aim at the standards of La Mortola or any other of the show gardens along the coast. As it is, our wages bill, though surprisingly small by English standards, is all we can manage. Guido, our custodian, spends half his time outside and has green fingers, though he grows some things much better than others. His cuttings are almost always successful and his hydrangeas are superb. But the real cultivation and the fertility of the land is the job of his uncle Valerio, who can be seen, four or five days a week, wielding the heavy two-pronged Italian digging fork.

Valerio is good looking, with a strong thin face, like a head on a Roman coin; though when my wife said this in the kitchen, she was greeted with gales of laughter. He has all the virtues of the universal age-long peasant. Tyrants may come and wars pass, but he cares nothing for them. All he wants is to be able to till the soil, and drink his wine, in peace. There are so many of his kind in the world and they are so important but yet have so little influence.

Valerio is not easy to get to know but, if you succeed, you will find him shrewd, with a dry sense of humour. It is difficult to know how much he is interested in anything but the land—in our archaeological searches, for instance—but from time to time he comes out with surprising bits of information which his uncle, or someone of a long-dead generation, had told him, and he has an uncanny instinct for telling us in which particular spot we should dig. I use the word uncanny deliberately. On one occasion there had been a bad shipwreck in the night and next day I saw, through my powerful field-glasses, a

trawler far out to sea, making for the harbour with its flag at half-mast. At the same moment Valerio, hardly looking up from his work, said to my wife: "They are bringing in the dead." With his good eyesight he may have seen the half-masted flag, but we more than half believe that he had not.

Apart from Guido and Valerio, we only employ casual labour. They are mostly old men who have worked here, on and off, for many years. They always come when there is a special job for them and, frequently, when they have nothing better to do.

There is a story, still to be told, of why we have an increasing number of birds, whose only enemies now, apart from the occasional visiting peregrine or harrier, are the cats which divide their time between breeding, stealing food from the kitchen and ranging the hillside; they are supposed to be necessary to keep down the rats and mice but have never been seen with either rat or mouse.

We have not got a very varied residential population of birds. There are some four or five pairs of blackcap warblers, which are always to be found in the same places. Then there are the usual tits, finches, sparrows, blackbirds, tree-creepers, nuthatches, wry-necks, robins and wrens of all three kinds. There are probably others which an amateur bird-watcher has failed to identify.

It is during the spring and autumn migrations that the watcher has fun. The castle has one big advantage for bird-watching: from the battlements one can look down on the olives. I find it very difficult to get my glasses onto small birds flitting restlessly and hungrily in the olive trees, particularly as no-one has told them that they will not be shot on our land; but you do get a better chance when looking down from above.

During the last four spring migrations, of which I have kept some record, I have only



Jocelyn Baba

Strong stone walls, olives and pines—the castle has not changed. The library tower was the guardroom, from which sentries patrolled the battlements. A lower wall gives protection to the only entrance

succeeded in identifying about sixty kinds, of which some stay to breed. The normal migrants include the tame and beautiful hoopoe, at least ten identified warblers—I am sure there are more of these, but they are difficult—the quail, the spotted and pied flycatchers, the woodchat and red-backed shrikes, the swallow and its relations the swift, the Alpine swift, the house martin and sand martin. Less common visitors have included the white-tailed eagle, the golden

Picking the grapes exercises all the muscles of the body and it is hot work in the September sun of the Italian Riviera. Home-made ladders are used when the grapes are too high to reach. The picker hands the bunches to a helper; on no account must they be dropped

All remaining photographs by Foto Ramondini, Rapallo, from the author



oriole, the blue rock-thrush, the kingfisher, large white heron, little egret and stork. Sea birds seldom come close enough for certain identification, but the Mediterranean gull, herring gull, at least one of the black-backs and the black tern are frequent.

The swallow tribes, both in spring and autumn, usually arrive in small detachments, but in the autumn of 1954 some four or five hundred of all five varieties gathered at or near the house during a spell of bad weather, and every morning some were found dead. One evening, within half an hour, all had gone and by the next morning the weather was set fair.

So far only the aesthetic aspect of the land has been mentioned. We have also two serious crops—oil and wine. Although both are produced on a small commercial scale, they are primarily domestic crops, for we, like our neighbours, produce first for our own consumption.

Our household uses nothing but our own unrefined oil, but this is thought to be rather strong for stomachs unaccustomed to it and we buy some refined oil for salads for ourselves and our guests; I feel myself that this is reckless extravagance but am in a minority of one.

We do not know how old our olive trees are; we are told that they were planted long before our predecessor bought the place nearly a hundred years ago. Nor do we know how many trees we have; they are unevenly spaced along the terraces but, where they are thickest or best grown, they present from above a carpet of grey-green.

Apart from regular pruning, to cut out the old wood and encourage the young bearing branches, they receive little cultivation, though every winter Valerio digs between some of them before planting the potatoes and beans. The chief pest is the olive-fly which bores into the young berries and, in some years, reduces the crop considerably. Weather conditions and the fly result in very wide fluctuations in the crop. In some years we sell an appreciable amount; in others we have little more than is needed for our own use.

The harvest is usually in November, but the later it is, the better the quality of the oil. The harvesting is mostly done by women from the village who receive in payment a share in the oil. It is rather a back-breaking job, picking up the olives shaken down from the trees, but there is a certain satisfaction in seeing one's basket filling up with the fat oily berries. We send our crop down to the cooperative press in the village and take great pride in the fact that our oil



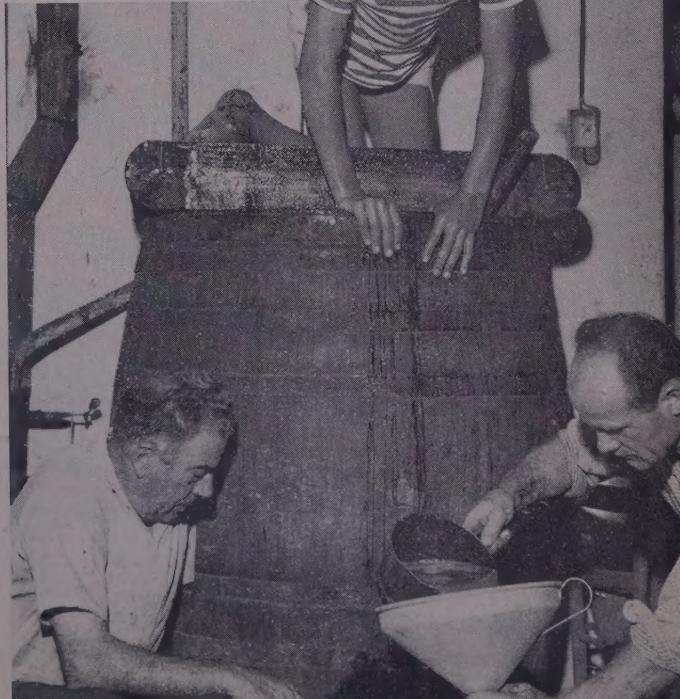
Valerio: the perennial peasant. For him the land is life, both material and moral. Here he carries the baskets of grapes to the house where the wine is made



In the cellar the grapes are sorted from the picking baskets. When a small tub is full, it is weighed and emptied into the big vat, from which the juice is strained into demijohns for the first fermentation



(Above) A small tub of grapes has been emptied onto a slatted tray on top of the big vat. Guido's younger son Luci is treading them, helped by his uncle Gianni. The juice drips through the mass of grape skins inside the vat and at the bottom is strained through a bundle of grape withies. Dino *(right)* pours the juice into one of the fifty-litre demijohns while Guido, resting in between weighing the buckets, looks on



usually fetches top price.

I feel I ought to know much more about olives and their cultivation but, with my very limited knowledge of Italian, my slight deafness and my wife's constitutional inability to interpret my ideas and not her own, it is very difficult to conduct a highly technical conversation. And, anyhow, I am much more interested in the grapes and their final product.

During the war the Germans hauled field-guns through the garden, put up masses of barbed wire and did about as much damage to the vines as was humanly possible. But we have steadily been replanting and our output of wine grows every year—and so, it seems, does our consumption and that of our tenants and guests, for as yet we have had none to sell. But we look forward to the day, quite soon, when we acquire a small bottling plant, some correct and rather severe Castello labels and a contract with the local hotel, and when the waiters at the hotel will say "this is a very good wine; it comes from the Castello which you can see across the harbour".

It is reputed that the commune has made wine since Roman days. It is almost all a light dry white wine. In some years, and we think this is particularly true when the *vendemmia* is late and the grapes very ripe, it has an unexpected fullness of quality. One usually drinks it within two years of making it, though there is no reason to think that it will not keep and, with the increasing quantities that we are making, we are experimenting. But our local wine will never be of the substance to discuss leisurely over a *tournedos* *béarnaise* on a cold winter's evening. It is for drinking in large quantities, in the hot sun and with the food of the country. Every glass that I drink is, I feel, an economy, for it costs much less than beer does in England and no reasonable man ever sips beer.

We also make a *passito* wine. To do this, you select a number of the best bunches and lay them out on bamboo mats in the greenhouse to dry in the sun, before making the wine. The result is a dry, strong wine, to be drunk in small quantities after dinner or with the sweet: it is rather pleasant and unusual.

We are sure that Guido shares, and welcomes, our enthusiasm for the grapes; he is very good with them.

The year's work starts with the winter pruning. I know something about this now because one winter's morning when Guido was very busy over

some unexpected trouble he came to me with a pair of secateurs in his hand. The household will not normally let us lift a finger to help ourselves but on this occasion he looked me firmly in the eye and said: "I think that, perhaps, the Signor Padrone would care to prune a vine." The Signor Padrone was kept on the job for three days, until other more practised hands were free to take over.

After the pruning comes the tying up, and large bills for the supporting timber for our new vines. Guido favours the pergola system, in which the vines are trained overhead as well as up the posts. He maintains, and experience is proving him right, that this greatly increases the yield.

Later, Valerio digs between the rows, turning in deep the grass and weeds that have grown up during the winter and sometimes interplanting with peas and summer vegetables.

By the end of March the vines have begun to shoot and in April comes the first critical period when the fruit is setting. At this time, also, spraying is started, to be continued through the summer. In June we strip some of the leaves so as to let the sun get to the grapes; this is a quiet, patient job for some of the old men.

By the end of September or the beginning of October the great bunches are ready for the *vendemmia*. Then the old men gather, the forty- and fifty-litre demijohns are purified, and the small tubs in which the grapes are first pressed and the press in which the second pressing is made. Finally, sulphur candles are burnt in the big vats—Valerio generally has this unpleasant job—and all is now ready for the great day.

At six o'clock in the morning all are up and gathered at the Casa Custode, Guido's house, where the picking baskets and secateurs are handed out and parties are detailed for receiving, stripping and pressing the grapes and for handling the great scales with which they are weighed.

The work proceeds with much laughter and chatter. When the big baskets are delivered to the pressing party, glasses are dipped in the fresh juice for all to sample; the old men nod their heads critically and we try to look wise as we also taste it.

A September day with the partridges in England can be hot, but not like an early autumn day here. Under a really hot sun you look down through the vines to the sparkling blue sea below. It is very beautiful, but it is heavy work carrying the big baskets up the hill and the picking itself means stretching up and bending



At noon the grape-harvesting stops and the trestle tables are laid on the terrace. About two dozen people sit down to a large lunch, with music and much wine. Afterwards picking is resumed very gaily

down and exercising every muscle in your body. By noon we demand to be released to run down and cool ourselves with one of the best bathes in the year.

By the time we are back, Guido's wife has laid long trestle tables in front of her house, and we all—some twenty of us, or more—sit down to an enormous meal, with music and much wine. The work is then resumed with even greater hilarity, particularly when one of the house-party falls down a terrace.

By evening the last rows have been picked and we gather once more at the Casa Custode while Guido tots up his figures and announces the result of the vendemmia. We congratulate each other, dash into a bath or once more into the sea, and after dinner we dance.

The serious business of making the wine has still to come; we have never been here for the whole process. The method used, in which there are variations, is traditional, and the moon comes into it a great deal. For the first few days, when the sugar in the grapes is doing its work and the juice is bubbling in the casks and demijohns, one would think that no-one could ever drink the stuff. But soon it clears and is transferred from one demijohn to another, for a second minor fermentation, and then again to another. This is the stage when the moon has first to be considered. Guido's father gave him strict instructions on this point, of which the following is a summary.

The fermentation process ends early in November. It is vital to the quality and clarity of wine that it should be decanted in good weather, not wet, during the old, not new, moon of January and again of May. The moon, he continued, affects not only the tides but the lives of men and beasts. It affects all liquids; it affects conception by women and cows.

By the following May, with the help of the moon, the wine is fit to drink.

One cannot write about the land, or about life here, without mention of the weather. In England I am never disappointed with the weather because I get what I expect: here I am frequently disappointed because I expect too much. But we believe that there is more to it than that and that Italy, in common with other countries, may have been passing through a cycle of unusual weather. It used to be traditional to put on thin cotton frocks on March 21. In recent years, while there are days in early spring, and even

around Christmas, when it is warm enough to wear a thin frock or shorts and an open-necked shirt, yet you have not been able to rely on warm weather in April or fine weather in May. One expected to bathe regularly in April—but not in recent years. One of the boatmen told my wife that he used to know the weather, but he cannot pretend to do so now.

If, however, one ignores these recent irregularities, the weather should run something like this. Rain in November and in the first half of December, fine summerlike weather over Christmas until February when it is likely to be cold and rather wet until the end of March; then one should get fine weather for months, only interrupted from time to time by three or four days of the scirocco wind ending, probably, with a thunder-storm and a return to fine weather. The scirocco comes up with a south wind and can produce rather unpleasant damp heat and rough seas. The fine weather comes from the north.

July and August are fairly hot, with rather more thunder-storms, but September and October are delightful months.

For half the year a fire in the evening is comfortable but, for much of that time, not really necessary, and there is no month in the year when one cannot expect sometimes to have meals in the garden.

When one is wading through snow slush in England or skidding on icy roads, one thinks nostalgically of Italian weather; it is only when we are in Italy that we become rather critical, and even then we forget the bad spell when the good one comes along. A few years ago, two young people, strangers to us, came up to ask for a certain address. It was in a cold wet spell in May. They looked very plain and very cold; they were undoubtedly depressed and cross. They announced their intention to cut their holiday short and to return to England next day. Having been watching my barometer, I discouraged them from doing this and rashly forecast an immediate change in the weather. They believed me and, by the mercy of providence, the next day was brilliant and they had nothing but sunshine for the rest of their holiday. They came to bathe from our rock and we saw much of them. In two days we realized that they were gay and charming and strikingly good looking. This should have been a lesson to us, but we still get depressed when the weather is not all that we unreasonably expect.